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EDITORIAL.

AN account of some of the persons who have contributed largely to increase our knowledge of Materia Medica would be incomplete without some mention of Dr. Asa Gray, the Fisher Professor of Natural History in Harvard University, whose portrait accompanies this number of NEW REMEDIES.

Professor Gray was born on the 18th of November, 1810, at Paris, Oneida County, N. Y., and in 1831 received the degree of M.D. from the medical school at Fairfield, N. Y. He continued but a short time in the practice of medicine, preferring to devote himself exclusively to the study of botany. In 1834, Dr. Gray was appointed botanist to the U. S. Exploring Expedition, but resigned the position three years later, owing to the delay of the enterprise, and was subsequently elected Professor of Botany in the University of Michigan. Before this institution had completed its organization, he accepted the Fisher Professorship of Natural History in Harvard University, in which position he has continued since 1842.

In 1834–35, Dr. Gray published two volumes of the North American GRAMINEÆ and CYPERACEÆ—one of his earliest contributions to botanical literature. Each volume contained a hundred species, illustrated with dried specimens. The work was sold by subscription, and the number of copies published was necessarily limited. In it were described several new species, and the characters and synonyms of many of those already known were revised. The work, although now very rare, is still an authority upon the subjects to which it relates.

In December, 1834, Dr. Gray read before the New York Lyceum of Natural History a paper entitled "A Notice of Some New, Rare, or Otherwise Interesting Plants from Northern and Western Portions of the State of New York," which at once gained for him much credit among scientific men. In 1838 appeared the first part of the "Flora of North America" which he edited conjointly with Dr. John Torrey, of New York. The work was, however, not completed, for by the time it had reached the end of COMPOSITÆ its authors were so overwhelmed with materials which rapidly accumulated, that their time was occupied in studying and classifying the specimens, and it was then evident that so many additions would be needed to the portion already gone over that an appendix would embrace more space than the original text itself. Instead, therefore, of continuing the "Flora of North America," its authors published from time to time, conjointly and separately, a series of memoirs, among which the following, by Professor Gray, are noticeable: *Plantæ Lindheimeranæ*—giving a description of the plants collected by F. Lindheimer in Western Texas; in which work Dr. Gray was aided by Dr. Geo. Engelmann; *Plantæ Fendlerianæ*—a description of plants collected by Aug. Fendler, in New Mexico; *Plantæ Wrightianæ Texano-Neo-Mexicanæ*—describing the extensive collection of Charles Wright, A.M.; *Plantæ Thurberianæ*, etc. During the past year, however, the materials which had been collected and elaborated for so many years, had approached such a state of completeness, that the author felt warranted to proceed with the work. Accordingly he published the first volume of a *Synoptical Flora of the U. S.*, which begins where the former work left off, and which, when completed, will be followed by a revised edition of the preceding portion.

In 1848 appeared the first volume of "*Genera Floræ Americæ Boreali-Orientalis Illustrata*," more commonly known as "Gray's Genera." The object of this work was to give one or more species of each genus of North American plants, with accurate analyses. Only two volumes, however, were issued, owing to reasons

similar to those which arrested the publication of the "Flora."

Dr. Gray is the author of two volumes containing descriptions of all the plants collected during the years 1838 to 1842 by the expedition of Commodore Charles Wilkes, excepting the specimens gathered on our Pacific coast. This is the most voluminous and, in many respects, his most important contribution to botanical literature.

As early as 1836 appeared the "Elements of Botany" which grew into the "Structural and Systematic Botany" and later became the "Botanical Text-Book" of the present day. This is acknowledged to be one of the best and most practical exponents of vegetable physiology in existence, and has rendered other works on this subject in this country almost superfluous. Another of his important works is the "Manual of the Botany of the Northern United States," which first appeared in 1848 and has already gone through several editions.

Not less valuable, in a broad sense, are writings adapted to popular use and even to the comprehension of children. In works of this class Professor Gray may almost be said to have been the pioneer, and his "First Lessons," "How Plants Grow," and "How Plants Behave," are widely known and well appreciated.

Numerous contributions have been made by him to the columns of the *American Journal of Science and Arts*, of which he has long been one of the Editors; while others, on subjects not always connected with botany, have appeared in the *North American Review* and other magazines.

For many years Professor Gray held the office of President of the *American Academy of Science and Arts*, and in 1872 he was President of the *American Association for the Advancement of Science*.

After the foregoing account of important achievements, it is hardly needful to remark the persistent industry of their author. Being possessed of robust health and systematic habits of labor, much has been accomplished by him that would have been left undone by one less fortunate than he in these respects, nevertheless the works of Professor Gray are something more than industrious compilations, and evince a genius for the study of science that is rarely met with, and which, when employed as it has been in the present instance, not only renders its possessor respected of all men, but reflects honor upon the country which affords a field for his labor.*

THE recent meeting of the American Pharmaceutical Association appears to have been in every way a successful one. Although the number of volunteered scientific papers was smaller than usual, the reports relating to pharmacopœial methods were sufficiently ample to take their place. Altogether, the results of the meeting are likely to be as valuable as those of any of its predecessors. The resident pharmacists seem to have spared no labor and forethought calculated to add to the enjoyment of their visitors, and the Indianapolis meeting will long be remembered by all who were so fortunate as to be present.

We regret that want of space prevents a full notice of the exhibition, many of the articles having been of exceptional interest.

OHIO pharmacists may be congratulated upon the successful organization which they have established in their State. We are glad to observe that the business relations of the profession are not to be ignored, but are to be considered and reported on annually by a standing committee.

WE often receive queries, asking for information about formulas, or compounds, with titles which are not known to us. The reason is that many of these preparations are of *local* use, or are used for purposes outside of our profession. We would, however, no doubt often be able to give the desired information, or obtain it from sources accessible to us, if these queries were accompanied with any information respecting the compound already in possession of the writer. For instance, somebody asks what is *Connolly's Powder*, without further specification. After three months' useless inquiry, we now ascertain that the inquirer wanted to know the composition of a *Preventive for Boiler Incrustation* which once had a small local reputation. We have spent, therefore, a good deal of time and ink uselessly, not only in this instance, but in many other similar ones. It is hoped that our readers will, *in their own interest*, comply with our request.

WE observe in the latest issue of one of our western contemporaries a very virtuous editorial reproof of those pharmacists who deal in patented remedies and nostrums, thereby introducing them to general notice, and, in some cases, securing for them such public favor that they are kept in stock by grocerymen. The value of the editorial is considerably lessened, however, by the fact that, inserted between the leaves of the same number, was a private circular calling attention to the fact that one of the editors is the agent, in that locality, for the sale of a secret remedy [$5.00 per bottle], which is *guaranteed* to be a sure cure for epilepsy.

It may incidentally be remarked that it is a violation of the postal laws to insert loose advertisements between the pages of journals which are mailed to subscribers at pound-rates.

* The basis for the above sketch was found in *The Popular Science Monthly* for August, 1872. The portrait is from a recent photograph.

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

The Vanilla-Plant.*

Of all orchidaceous plants, the Vanilla is the best known and most important. Its value has been known for a long time. Its fruit appears to have first made its appearance in Europe at the beginning of the sixteenth century. Miller introduced a living plant into England towards the close of the eighteenth century, but it is not certain which particular species of Vanilla it was which was known at that time. Linné named the plant which was brought to his notice "*Epidendrum Vanilla*," and this is supposed to have been the same as Miller's. A few years afterwards, Swartz, while carefully studying the flower of Vanilla, observed decided differences from the genus Epidendrum, which induced him to establish a new genus, and he named the plant *Vanilla aromatica*. Subsequently however, Gréville brought from America seedlings of a species differing from the preceding by the shape of its leaves, and this was named *Vanilla planifolia* by Andrews. This is the same species which was brought to England, and to the Paris Museum, in 1810, and finally also to Belgium, and which was found to be the source of the commercial Vanilla.

The Vanilla is a fleshy climbing plant which can reach the top of high trees. Its stem, which branches easily under culture, has a diameter of 2 to 3 centimetres ($\frac{3}{4}$ to $1\frac{3}{16}$ inch). The leaves are arranged on the two-rank principle. They are between 15 and 20 cm. ($5\frac{7}{8}$ to $7\frac{7}{8}$ inch.) long, and are slightly twisted on their short petiole, so that they have the appearance of being inserted obliquely. This torsion appears to be caused by the effort of the leaves to expose their upper surface to the light. Besides the roots lodged in the soil, there are numerous adventitious and aerial roots arising from the stem or branches, which strike root in the ground when they reach the latter. These roots arise at the level of leaves, and in the neighborhood of tendrils, by which latter the plant fastens itself in the progress of climbing. The flowers arise in the axis of leaves, and are quite numerous; but, in order to obtain handsome fruit, it is necessary to leave only a few flowers on the plant. These flowers last only one day, and the fecundation is performed preferably in the morning, to be successful. The operation will be understood from Baillon's remarks quoted below. The small instrument which is used for this operation is a thin cut fragment of bamboo or the end of a rib from a palm leaf. A practised workman can fecundate nearly 1,000 flowers

The Vanilla Plant.

* Abstract of a Paper by Mr. Poisson, in *Journal de Pharm. et de Chem.*, July, 1879, 27.

each morning. A month after the operation, the fruits have already acquired the proper shape: but they must remain there for six or seven months before they are fully ripe. The flowers of Vanilla do not share the richness of colors with the other members of the family; they are merely whitish or yellowish, according to the species. A physiological peculiarity of the plant is the facility with which the stigma attracts the pollen, when the latter is presented to the former. Baillon remarks on this peculiarity: "On dark and not very warm days, it was necessary to cut into the very centre of the stigma in order to deposit there the small anther. But when the sun had strongly heated the roof of the hot-house, from which the plant depended, provided the contents of the anther did not firmly adhere to the needle which was used to guide it to the stigma, the anther, as soon as it was brought within a certain distance from the stigma, would detach itself from the needle, and, as if violently attracted, would precipitate itself into the cavity, like an arrow. There is nothing better to compare this with than the sudden movement which a piece of iron makes when brought within the attractive power of a magnet." This curious fact does not appear to have been noticed in other plants.

The first travellers who observed the vanilla in a wild state reported that it grew in the low and swampy bays near the sea; but, since then, it has been found in the forests in various portions of Central America. In the lower districts of Mexico, where it is cultivated, it bore the name *Tlilxochitl* or *Banilla*, and, in Spanish, was and is called *Vainilla*. The number of species and varieties of Vanilla is not well known, since the study of most exotic orchidaceous plants is rather difficult. In Mexico there have been a dozen different types cultivated, five of which are regarded as distinct species. Delteil gives a list of the various species cultivated in different countries; according to him there are cultivated in Mexico the following four only: *V. sativa*, *V. sylvestris*, *V. planifolia*, and *V. Pompona*; in Guiana: *V. guianensis*, with yellow flowers and thick fruit; at Bahia, *V. palmarum*; in Brazil and Peru the *V. aromatica* of Linné, which is less aromatic than the others. At Reunion two sorts are cultivated, which appear to be two varieties of *V. planifolia*.*

Under the name "Vanillon," there is found in commerce a short and thick vanilla, which is furnished by *V. Pompona*, but its fruit is of less value.

A good quality of vanilla may be obtained today for 180 or 250 francs the kilo†; if it be "frosted," that is, covered with fine white needles of vanillin, it will fetch a higher price. But the "vanillon" brings only about one-fourth the price of good vanilla.

The methods of preparing vanilla for the market are different in different localities. There are three principal ones. The oldest process consisted in exposing the fruits alternately to the sun and to the shade until they had become sufficiently dry. This is still the practice in Mexico and Guiana, where the best vanilla is raised. Some hasten the desiccation by occasionally exposing them to artificial heat. A second method consists in dipping the fruits for a short time into boiling water, and afterwards exposing them alternately to sun and shade.* Finally, a third process is the employment of a stove or closed oven, heated to a temperature of 50° to 75° C. (=122°–167° F.), in which the vanilla is kept for 24 to 36 hours. From the investigation of Delteil it appears that the second process, which is in use at Reunion, yields comparatively the best results. The only drawback is, that the sun is often clouded during the harvest at Reunion, so that the Mexican process would probably succeed there better. The last step of the process of desiccation is to place the fruits into a drying-room, where they must remain for at least one month, and where they must be frequently examined. Finally they are placed into tin-boxes (or other air-tight packages) in order to prevent their further drying, which would injure their value.

* See item on page 319.

† Our latest price lists quote Vanilla at $14 to $18 per lb. for prime, and $7 to $14 for inferior.

Tincture of Kino.

THE *Pharmaceutical Journal and Transactions* of Aug. 9th contains the following communication, which refers to the paper on Tincture of Kino, by Mr. R. Rother, in NEW REM., July, 1879, p. 196:

"SIR:—After the interesting paper by Mr. R. Rother, which appeared in the journal of Aug. 2d, perhaps the following note may be of some value:

"Some fifteen or sixteen years ago the idea occurred to my mind that the addition of a small quantity of glycerin to tincture of kino might, by preventing the aggregation of the gum particles, do away with the annoying tendency to gelatinization.

"I found it to answer the purpose admirably, and have never been troubled with gelatinized tincture since.

"The proportion of glycerin I use is 5 per cent. JOHN B. MERRIKIN."

Remarks by Ed. New Rem.—The above suggestion is not new to American pharmacists. The addition of glycerin has repeatedly been advocated, for instance, by J. W. Wood in *Am. Journ. Ph.*, 1871, p. 344; by a writer (name not mentioned) in *Tennessee Pharm. Gaz.*, Vol. 2, 41, and others. Another plan, not hitherto

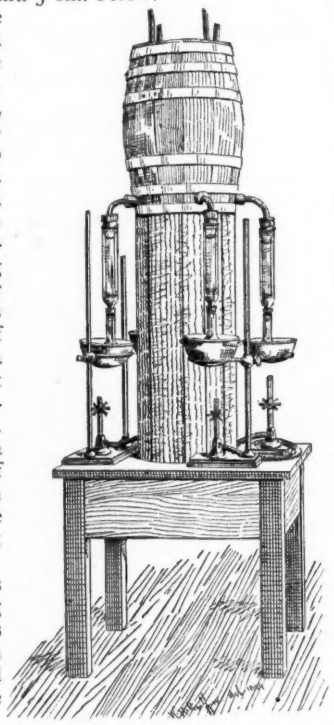
* See also *Simmonds, The Commercial Products of the Vegetable Kingdom*, p. 433.

published, and communicated by Messrs. C. H. and J. Price, of Salem, Mass., to Mr. S. A. D. Sheppard, of Boston (kindly supplied by the latter), is, to mix the kino with an equal weight of sugar, instead of with sand, in which case it is said not to gelatinize. Various other methods have been advocated at one time or another. We shall have occasion hereafter to recur to the subject.

[ORIGINAL COMMUNICATION.]

AN APPARATUS FOR REPERCOLATION.

THE apparatus here figured has been described by several German and American chemists,* but it has so many advantages over most forms that it is again presented. In any convenient water-tight vessel is a worm of block-tin pipe having an internal diameter of 9 mm., and a length of about two to two and one-half metres. The lower part of this worm is fitted, by an ether soaked velvet cork, to a glass percolator having a diameter of 4 cm., a length of 20 cm. to the constriction, and 5 cm. below.



Within the percolator is a smaller tube flanged at top and bottom, having a diameter of 2.5 to 2.8 cm, and a length of 14 cm.

As here figured, the keg used for four percolators has a height of 45 cm., and a diameter at top and bottom of 30 cm. It stands on a cylinder of wood which extends above the table 35 cm.

A light glass flask weighing about 30 grms is fitted by an ether-soaked cork to the percolator.

The bottom of the inner tube is covered by filter paper and fine washed linen tied on by linen thread. Two to five grams of the finely pulverized drug are introduced, and the tube is suspended in the percolator by fine copper or platinum wires, the flask connected below, and the solvent is poured on the drug in the tube.

The whole apparatus is then fitted to the worm by means of the large cork above, and heat is applied to the flask by means of a water-bath and Bunsen's burner.

I have used the following liquids for extraction, and have had no trouble in volatilizing them from the water-bath so completely as to keep the drug under extraction constantly covered with liquid: ether, absolute and eighty per cent alcohol, carbon disulphide, chloroform, methylic alcohol, petroleum ether.

Where the liquid volatilizes with difficulty, it is well to wrap a paper or towel around the percolator to prevent cooling the vaporized solvent before it reaches the condenser.

It is possible to get closely accordant quantitative results by a judicious selection of solvents.

The size of the percolator may be increased considerably without a corresponding enlargement of the condenser.

HENRY B. PARSONS.

WASHINGTON, D. C., Aug., 1878.

* B. Tollens, *Zeitsch. f. Anal. Chem.*, 1878, p. 320. NEW REMEDIES, Nov., 1878, p. 335. Proc. Am. Chem. Soc., Vol. II., No. 2, p. 85, etc.

[ORIGINAL COMMUNICATION.]

MISCELLANEOUS CONTRIBUTIONS FROM THE ORIENT.

BY PROF. XAVER LANDERER.

BUG-POISON.—The most effective agent for the destruction of bugs is a saturated solution of tobacco mixed with the fresh leaves and flowers of *Nerium Oleander* L. The latter, known in German as Rosen-Lorbeer, in English as Rose-bay, in modern Greek as πικροδάφνη (pikro-daphnē) or ῥοδοδάφνη (rhododaphnē), is a native of Southern Europe and Western Asia. On applying such a strong decoction to the places where bugs abound, not only the insects are killed, but their eggs are also destroyed.* Almost equally effective is also the powder of the flowers of *Pyrethrum roseum* Lindl. (or *P. carneum* M. B.), known generally by the name of Persian Insect Powder.

HEDGEHOG-GALL AS REMEDY IN INFANTILE COLIC.—Throughout the Orient the gall of the common hedgehog (*Erinaceus Europæus* L.), is in great repute as a remedy in infantile colic. In Greece this useful but much persecuted animal is principally found in the vineyards, as it is extremely fond of grapes, of which it mostly selects the best for food. Its flesh is sold by poultry-dealers as a delicacy, and they also sell the gall, which they allow to dry up in the small gall-bladder. The vulgar term for this article is χολὴ τοῦ ἀκανθοχοίρου (chole tou akantho-choirou—gall of the hedge-hog).

* Our friend Landerer adds that the mixture above mentioned might be styled "κοριοθανατικόν" (korio-thanatikon, or "bug-death"), which elegant term we recommend to the "Sure-pop" folks as a capital word for an advertisement.—ED. N. R.

POCULA EMETICA.—To the notice on Eternal Pills and Emetic Cups, contained on p. 216 of our July number (1879), Prof. Landerer adds the following:

"Many years ago, while journeying through all parts of Greece, I also visited the monasteries, some of which harbor extremely aged inmates. In one of these cloisters, called *Μεγασπίλαιον* (mega-spilaion—"great cavern"), I was shown a supposed miraculous cup, or chalice, and small plates or discs, which were filled or soaked in wine during several hours, or even several days, for the purpose of producing purging and vomiting in those who drank the wine. This "cure" is undertaken by the common people in the spring, and is believed to preserve their health during the summer. The plates or discs above mentioned no doubt serve the same purpose, and are composed of the same metal as the 'eternal pills.'"

ON THE NEGLECT OF EATABLE FUNGI.—The name of mushroom in Greece is *μανιτάρι* (manitari, plur. —ia). The best varieties of this useful vegetable, namely *Boletus edulis*, and other species, *Agaricus campestris* and *Morchella esculenta*, are found among these. The Greeks, as well as the Turks, have an aversion against them as food. Peasants, who meet them in field or forest, stamp upon them with their feet, or destroy them in some other manner. Only rarely they are brought to market, and are then bought up only for the table of foreigners, or at least for the "Franks" (firengistân-dar âdamlar, as the Turks say). The truffle (*Tuber cibarium*, modern Greek *ὕδνον*) likewise occurs in Greece, on the mainland as well as on the islands, and particularly upon Crete, where millions of chestnut-trees grow. But as it is necessary to look for truffles more or less deep below the surface, and as the orientals hate work of any kind, this valuable food is entirely neglected.

The toadstool (*Agaricus muscarius; Amanita muscaria*), however, is used by the country-people as a poison for flies. It appears to be unknown among the people that even poisonous mushrooms may be made edible by boiling them with salt-water, and rejecting the liquid. The residue is harmless.

ATHENS, GREECE.

Decoction of the Tomato-Plant as an Insecticide.

A WRITER in the *Deutsche Gärtner-Zeitung* recalls the fact that a decoction of the stems and leaves of the tomato-plant forms a useful insecticide for the greenhouse. He has found that when the decoction is syringed over plants attacked by insects it at once destroys black or green flies, caterpillars, etc., and that it leaves behind a peculiar odor which prevents insects from visiting the plants for a long time.—*Pharm. Journ. and Trans.*

[ORIGINAL COMMUNICATION.]

THE PREPARATION OF DILUTED ALCOHOL (0.941) FROM ALCOHOL OF ANY STRENGTH.

BY W. T. WENZELL.

IN conformity with the idea of abandoning all measures of capacity for parts by weight in the forthcoming Pharmacopœia, it is not more than proper that the same principle should be extended to the making of Diluted Alcohol. As it appears to be impossible to obtain in the market at all times alcohol of definite strength,* the only way to meet this difficulty is to reduce the alcohol, whatever strength it may be, in accordance with its *absolute* alcohol strength. Having had this idea in my mind, together with the proposition to get some simple figures by which alcohol and water can be mixed by weight, I have constructed a table, by which alcohol of any strength, from 0.817 to 0.853, at 60° F., can be reduced to alcohol of 0.941 at same temperature, in parts by weight, and the simplest proportion *i. e.* (whole numbers).

This table is constructed upon a table given in U. S. Dispensatory, p. 86, which gives the percentage composition by weight of alcohols of varying strengths.

Reference to this table shows that an alcohol of sp. gr. 0.835, at 60° F., contains:

* Prof. Wenzell has kindly furnished this paper to the Committe on Revision of the U. S. Ph., appointed by the Amer. Pharm. Assoc. The paper has been presented to the Association, and is now printed in advance of the Proceedings, in order to afford ample time for suggestions from others.

The paper contained originally the following sentence, which was meant as a reply to some remarks in a letter of the undersigned to Prof. Wenzell, and is, therefore, transferred to a note:

"From your statement you appear to prefer Stronger Alcohol for its preparation, because you assume such an alcohol can be had of uniform strength, whilst the officinal is deemed more variable in this particular. I, for one, do not share this opinion with you, inasmuch as I have found invariably that Western (Chicago and Omaha) alcohols and California alcohol never come up to the required strength of 95% by volume; they usually fluctuate between 92 and 93%. I think that, owing to this variability, no alcohol sold for 95% spirit can be accepted as the standard."

If the letter of the undersigned to Prof. Wenzell has been interpreted as stating that 95% alcohol was always accessible in the market, it must have been the fault of the hurry with which it was written. The undersigned fully agrees with Prof. Wenzell that there is no such "alcohol" sold, at least under this name alone, except by accident. But what the undersigned *meant* to convey was, that the term "alcohol" of the present U. S. Ph. should hereafter be assigned to what is now called "alcohol fortius;" in short, that the U. S. Ph. of the future should recognize but two kinds of alcohol, namely alcohol of "so-called 95%" and diluted alcohol. The so-called 95% is generally near 93%, and does not vary more than perhaps 1% from this. It will, therefore, be comparatively easy to get approximately identical products. But the term "95%" has become so current in commercial parlance for the particular kind of stronger alcohol indicated above, that it is apt to drop from the pen or lips unawares.

CHARLES RICE,
Chairman of Committee.

Alcohol.....85 parts by weight.
Water.....15 " "

The same table shows that alcohol of sp. gr. 0.941 at 60° is composed of:

Alcohol.....39 parts by weight.
Water.....61 " "

From these data results the following equation:

$$39 : 61 :: 85 : x$$
$$x = 133. \quad \text{Ans.}$$

From this it sems that 85 parts by weight of absolute alcohol contained in 100 parts by weight of 0.835 alcohol will require 133 parts by weight of water for conversion into a spirit of 0.941; but the 100 parts of 0.835 alcohol contain already 15 parts by weight of water. On subtracting this amount from the quotient obtained by the equation, the remainder will give the actual amount of water by weight required:

$$133 - 15 = 118$$

Subsequent experiments made by mixing quantities by weight of alcohol and water as deduced by the foregoing calculation, and taking the sp. gr. of such mixtures at 60° F., gave approximately exact and satisfactory results. For my guidance in these experiments I have adopted the following rule:

Rule.—Multiply the percentage amount of alcohol contained in the given alcohol by the given quantity, and place in the product a decimal point two figures towards the left (or, in other words, divide by 100).

Then multiply this product by the percentage amount by weight of water contained in the required alcohol, and divide the product by the percentage amount by weight of alcohol contained in the required alcohol.

Finally subtract from the last quotient the quantity obtained by multiplying the percentage amount by weight of the water contained in the given alcohol by the given quantity of alcohol, placing in the product a decimal point two figures towards the left (or, in other words, dividing by 100), and the remainder will be the amount of water by weight to be added to the given quantity of the given alcohol.

Example: How much water is required to convert ten pounds of alcohol of sp. gr. 0.835 at 60° F. into an alcohol of sp. gr. 0.941 at 60° F.?

$$85 \times 10 = \frac{8.50 \times 61}{39} = 13.3$$

$$15 \times 10 = \frac{1.5}{11.8} \quad \text{Answer.}^*$$

* Note by Ed. N. R.: The calculation of this example does not strictly follow arithmetical rules, but is merely intended to illustrate the different steps of the operation. Carried out in full by the rule it would be:

$85 \times 10 = 850$; $850 : 100 = 8.50$;
$8.50 \times 61 = 518.50$; $518.50 : 39 = 13.3$;
$15 \times 10 = 150$; $150 : 100 = 1.50$
$13.3 - 1.5 = 11.8$ Answer.

This rule is very useful, but is quite difficult to carry in the memory. We would therefore suggest to substitute for it a simple mathematical formula, derived directly from the rule itself.

Let n denote the *parts by weight* of the alcohol to be reduced to spec. grav. 0.941.
a' the *percentage* of *alcohol* by weight in the alcohol to be reduced.
w' the *percentage* of *water* by weight in the alcohol to to be reduced.
a'' the *percentage* of *alcohol* by weight in the alcohol desired to be produced.
w'' the *percentage* of *water* in the alcohol desired to be produced.
x the *parts by weight* of *water* which must be added to the n parts by weight of alcohol to be reduced.

Then by following the rule above given, we obtain:

$$\frac{\frac{a' \times n}{100} \times w''}{a''} - \frac{w' \times n}{100} = x$$

or, in simpler form, and leaving off the multiplication signs:

$$\frac{n(a'w'' - a''w')}{100\, a''} = x$$

This formula is generally applicable to any strength of alcohol, both of that to be reduced and of that to be produced. But as, in the special case before us above, the alcohol to be produced is always that of spec. grav. 0.941, which contains by weight 39 parts of alcohol (corresponding to a'' above), and 61 parts of water (corresponding to w'') we may at once substitute these figures in place of the corresponding letters in the formula. The special formula for making diluted alcohol of spec. gr. 0.941 from alcohol of any strength then becomes:

$$\frac{(61\, a' - 39\, w')n}{3900} = x$$

But the numerical relations between 10 and 11.8 are by no means simple, at least not sufficiently so for our purpose. I have found that, on taking the quantities obtained in this manner, and viewing them in the light of vulgar fractions, and then converting these into decimal fractions, I have, in some, instances, obtained simple figures at once, and when I failed by this procedure, the end was then accomplished by multiplying each respectively, the numerator and the denominator of the decimal fraction, by one and the same number, until figures were obtained which gave approximately the simplest numbers.

Example: The quantity obtained in the foregoing calculation, if placed as a fraction, is as follows:

$$\frac{\text{Alcohol } 10.00}{\text{Water } 11.80} \text{ converted to dec. fr.} = \frac{84{,}745}{100{,}000}$$

These figures are as remote from being simple as are the figures of the preceding vulgar fractions. On multiplying the quantities of the decimal fractions with 2, then 3, and so on, it was not until the arrival to figure 13 that numbers were obtained and accepted as being satisfactory.

$$\frac{84{,}745 \times 13 = 11.016}{100{,}000 \times 13 = 13.000} = \frac{11 \text{ Alcohol}}{13 \text{ Water.}}$$

Thence 11 parts by weight of alcohol of sp. gr. 0.835 at 60° F. require 13 parts by weight of

water to make an alcohol having a sp. gr. of 0.941 at 60° F.

The foregoing scheme is herewith presented with annexed tables as the best I can suggest, and would recommend its adoption (I mean the table). It will be found useful, not only for the purpose for which it is designed, but will, sufficient scope having been given to the table, be of use in reducing alcohols regained by apothecaries in the manufacture of fluid extracts.

Alc. to be reduced to Spec. Gr. 0.941. at 60° F.		Amounts by weight of Alcohol and Water, as per calculation.		Simple ratios by weight of Alc. and Wat.	
SPEC. GR.	SPEC. GR.	ALCOHOL.	WATER.	ALC.	WAT.
0.817	0.809	110,295	150,000	11	15
0.819	0.811	75,000	100,000	3	4
0.822	0.814	38,900	51,000	39	51
0.825	0.817	39,000	50,000	39	50
0.827	0.819	19,920	25,000	4	5
0.830	0.822	12,999	16,000	13	16
0.833	0.824	99,578	120,000	5	6
0.835	0.827	110,215	130,000	11	13
0.838	0.830	13,030	15,000	13	15
0.840	0.832	150,681	170,000	15	17
0.843	0.835	90,694	100,000	9	10
0.846	0.838	12,070	13,000	12	13
0.848	0.840	17,038	18,000	17	18
0.851	0.843	390,012	400,000	39	40
0.853	0.845	10,000	10,000	1	1

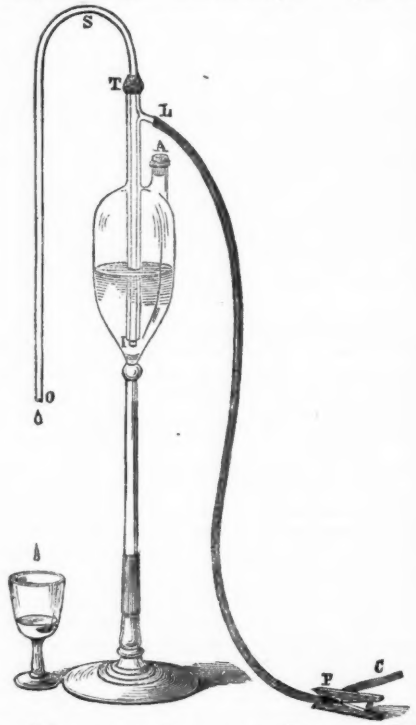
All that is required is to take the sp. gr. of the alcohol at a temperature of 60° F., and should be done any way when the package is received. The table furnishes, in addition, the percentage strength of alcohol at 77° F., as prepared by Dr. Squibb, as it is frequently desirable and much easier to raise the temperature than to lower it. The proportions given in the table are approximately correct, most of them having been verified by actual experiment, and found to correspond with the calculation.

I have not determined the rate of contraction which takes place in making these mixtures, as contraction does not enter as a factor when alcohol and water are mixed and used as parts by weight.

SAN FRANCISCO.

The Gravivolumeter.

THIS instrument, which is designed by its author, Mr. A. Houzeau, to serve for the rapid volumetric analysis of various substances, consists of a pear- or egg-shaped flask supported by a foot, and having two tubulures. The tubulure *T* consists of a glass-tube which is fused into the body of the flask, and nearly extends to its bottom. Lateraly, at *L*, it has a small branch, to which is attached a rubber-tube, which is passed through a pinch-cock or clamp, where it may be compressed or released, to prevent or to permit the access of air, as may be required. Through the tubulure at *T*, a bent siphon-tube, *S*, is inserted, which reaches inside the flask to a trifle beyond the bottom of the tube *T*, while the outer limb is somewhat longer. The calibre of the siphon-tube is such that when the liquid is permitted to fall *in drops*, by properly regulating the supply of air with the pinchcock, each drop represents, at 15° C., an exact weight of 0.050 gm.; 10 drops = 0.5 gm., and 20 drops = 1 gm., with



a possible error of 1 or 2 milligrams. [The author evidently proposes to use such test-solutions, the specific gravity of which does not vary greatly from that of water, and to add the reagent to the liquid to be titrated by drops. The number of drops used, calculated for the known amount of the reagent contained in them, yields the required figure. If the specific gravity of the test-solution differs much from that of water, it will only be necessary to calculate from its sp. gr. the difference of a drop corresponding to 0.05 gm. of water.] The author uses this apparatus for the analysis of sulphates, etc., in water, for the estimation of mineral acids in general, and for other purposes. [It is a question, however, whether sufficiently accurate results can be obtained by this instrument.]—From *Journ. de Ph. et Ch.*, June, 1879, 506.

The Menhaden Fishery.

AMONG the papers read at the recent meeting in Saratoga of the American Association for the Advancement of Science, was that of Professor George Brown Goode, of Middletown, Ct., who

gave a description of the Menhaden, abounding in interesting facts and figures. The principal points therein are as follows:

He said that the herring family is represented on the Atlantic coast of the United States by ten species, all of which swim in immense schools, and several, such as the sea-herring, shad, and the various species of the river alewives are of great economical importance. In abundance and value these are all surpassed by the menhaden, a fish of peculiar habits, concerning which little has been known and written. The menhaden has at least thirty distinct popular names, causing great confusion. North of Cape Cod it is called the "pogy." About Cape Cod it is called "hard-head" or "hard-head shad," and in Eastern Connecticut "bony-fish," in Western Conneticut the "white-fish," and in New York the "mossbunker." At New Jersey manufactories, where it is canned for food, it is called "American sardine" and "ocean-trout." In summer, menhaden are found in the cost waters from Maine to Florida; in the winter only south of Cape Hatteras. The results of the work of nearly 200 observers show that the first schools appear in Chesapeake Bay in March and April, on the coast of New Jersey in April and early May, on the south coast of New England in late April and May, and off Cape Ann about the middle of May. Returning they leave Maine in late September and October; Massachusetts in October, November, and December; Long Island Sound in November and December; Chesapeake Bay in December, and Cape Hatteras in January. A strange fact is that their northern range has become somewhat restricted within twenty-five years. This year they have hardly passed north of Cape Cod, but on the fishing grounds of Southern New England they are as abundant as ever. After the appearance of the vanguard they rapidly increase in abundance until the sea appears to be alive with them. They delight to play in inlets and bays, and are very fond of shallow waters protected from the wind. Brackish water attracks them and they are found at the mouths of the streams. They swim in enormous schools, their heads close to the surface, packed side by side, and often tier above tier, almost as closely as sardines in a box. At the slightest alarm the school sinks toward the bottom, after escaping its pursuers. Their motions are capricious; at times they swim around and around in circles. At other times they sink and rise. On warm, still, sunny days they may always be seen at the surface, but cold or rainy weather and prevailing north or east winds quickly cause them to disappear.

The winter habitat of the menhaden, like that of other cold water absentees, has never been determined. The most plausible hypothesis supposes that, instead of migrating toward the tropics or hibernating near the shore, they swim out to sea until they find a stratum of water of favorable temperature. The menhaden is by far the most abundant species on the east coast of the United States. Several hundred thousand are frequently taken in a single draft of a purse seine. The town of Boothbay alone, in 1877, took 50,000,000, but there is no evidence of any decrease. Their food probably consists in large part of the sediment which gathers upon the bottom of still, protected bays and contains much organic matter, and also of the vegetation that grows in such places. The breeding grounds are thought to be on the off-shore shoals from George's Banks to Florida Keys. Every predaceous animal which swims in the same waters feeds on menhaden, whales and dolphins consuming them by the hogshead. The bluefish and the bonito are their most destructive enemies, not even excepting men, and rush through schools, killing immense numbers besides what they eat. Professor Goode estimated the total number of menhaden destroyed annually on our coast by predaceous animals at a million million of millions.

The menhaden's place in nature is evidently to be eaten. Man takes from the water every year eight or nine hundred millions of these fish, weighing from 200,000 to 300,000 tons; and when he brings upon his table bluefish, bonitoes, weakfish, swordfish, or bass, he has before him usually menhaden flesh in another form. The commercial importance of menhaden was then dwelt upon, and the many uses to which it is now applied were mentioned. As a source of oil, the menhaden is more important than any other marine animal. Its annual yield usually exceeds that of the whale (from the American fisheries) by about 200,000 gallons. In the value of all the products, the menhaden fishery is surpassed by three only—the cod fishery, estimated in 1876 at $4,826,000; the whale fishery, $2,850,000; the mackerel, $2,275,000; the value of the menhaden fishery this year being $1,658,000.—*The Tribune.*

Beet Sugar in the United States and Canada.

THE *Philadelphia Record* says that fourteen companies for the manufacture of beet-root sugar have already been formed in the United States and Canada, and the demand for seed this year was so great that immense quantities were imported from France. Several tons were ordered early in the year for persons residing in New Brunswick and Delaware, the Maine Beet-sugar Company took three tons on the 14th of April, and on the 12th of May an equal amount arrived for farmers in the Conneticut Valley. Six pounds being considered amply sufficient for planting an acre, it can readily be estimated that the area devoted to this industry is already large.

Good beets are said to yield from nine to ten pounds of sugar to the cwt. which is rather more

than can be got from sugar cane. But it is claimed that in many parts of the South, owing to bad management, less than four pounds is the yield. It is evident that the sugar interest of of the Northern States will at this rate soon outstrip that of the South.

Emptying Acid Carboys.

THE construction of pumps adapted to raise acids and other corrosive liquids from the large glass carboys, in which they are sold and transported in bulk, is a matter which interests not only pharmacists, but, likewise, many who pursue trades and mechanical pursuits. The fragile nature of the glass carboy and its liability to be broken in handling, together with its want of adaptability to pouring small quantities without spilling, have led to the employment of various devices, some of which have already been described in our pages. Our exchanges have recently contained a number of illustrations of apparatuses, some of which hold the carboy firmly, so that it can be turned upon trunnions, and thus emptied, as in figures 1 and 2. Others, like figures 4 and 5, employ a siphon as a means for causing a flow, while in figure 6 a pump of ingenious construction is employed.

Figure 1 was contrived by Mr. Talbot, of Gloucester, England, and is practically the same as the German carboy-tilt, No. 2. Figure 4 is also an English model, the essential feature being the wooden box used to incase the lead-pipe, and serve as its support. The peculiarity in Figure 5 is the wooden pinch-cock employed to control the flow of acid through the rubber tube, which forms the siphon. In both the latter, the flow of fluid is started by blowing into the carboy by means of the small tube passing snugly through the cork. By raising the India-rubber tube, and opening the pinch-cock, the contents of the siphon can be emptied back into the carboy. Figure 3 is a form of pump for exhausting the air from a siphon and starting the flow of liquid. The stop-cock serves to close the long arm while the pump is in operation and to stop the flow when needed.

Still another method is that of the Nichols' Acid Pump, made in New London, Ct. (Figs. 6 and 7).

* FIG. 1.

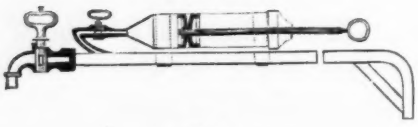
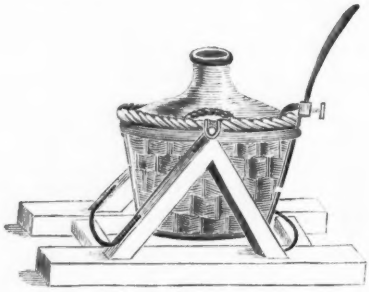
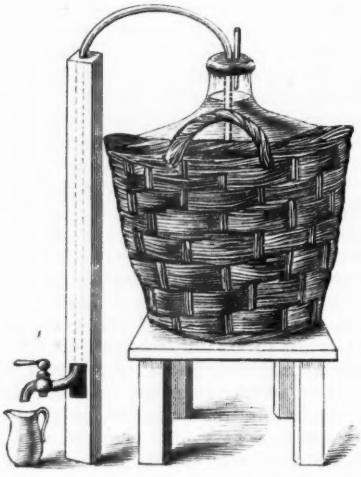


FIG. 3.



† FIG. 2.



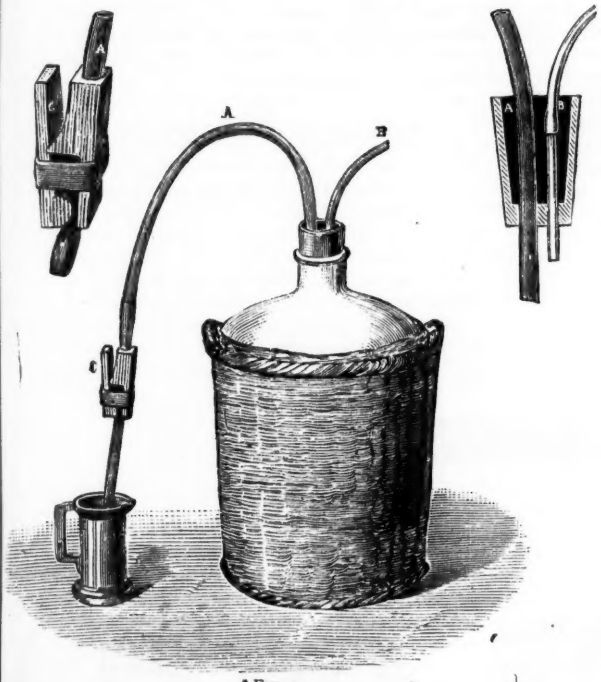
‡ FIG. 4.

* From the *Mineral Water Trade Rev.*

† Manufactured by H. Friedrich, in Leipzig.

‡ From the *Mineral Water Trade Rev.*

This pump has for three years or more been in the market, but has undergone from time to time considerable improvements and modifications, to adapt it to various uses, the latest form, known as the "No. 4" pump, has just been



* Fig. 5.

introduced, and is shown in the adjoining figures. A sample of this pump has been sent to us for examination, and shows evidences of careful study and experimentation on the part of its inventor, and excellent workmanship in its manufacture. The essential features of its working parts may be described as follows (see Fig. 6).

A glass chamber, supported by an iron ring, has at its lower end a poppet valve of glass. Inserted at its upper end is a second and smaller chamber, also of glass, conical in shape, and connected with the largest chamber and with the curved discharge-pipe by means of metal rings and screws. The second chamber has also a poppet valve at its lower and narrow end. This arrangement leaves an air-space between the two chambers with which the only communications are by means of the poppet-valves in the bottom of the outer chamber, in the bottom of the inner chamber, and also through an opening in the side of the outer chamber, into which the end of an india-rubber bulb is forced. The action is as follows: The rubber bulb being compressed, its air is driven into the space between the two glass vessels, and presses the lower valve tighter into its seat, while it raises the upper valve and escapes into the inner chamber. The bulb, being then relaxed, is filled with air from the air-space between the

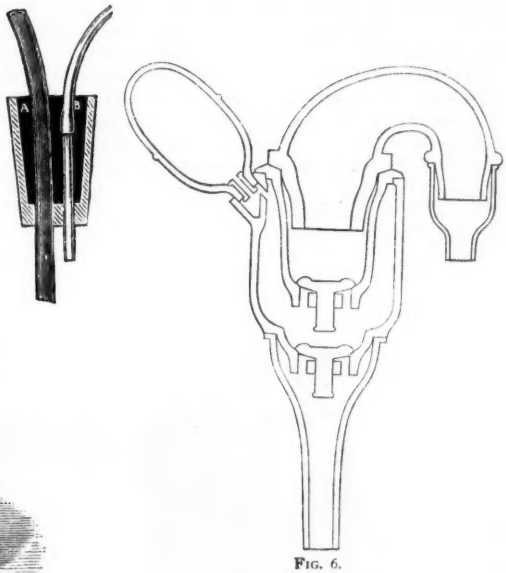


Fig. 6.

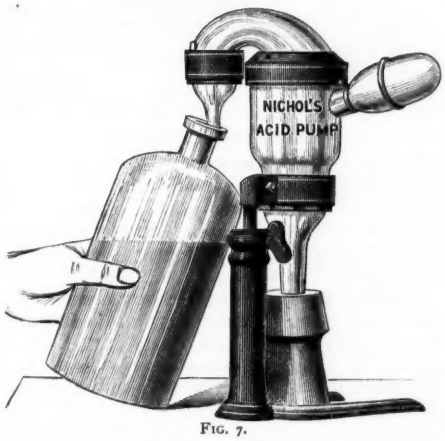
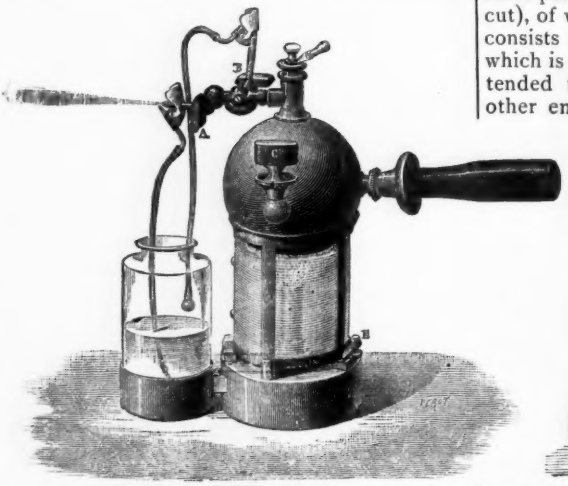


Fig. 7.

glass vessels, the upper valve closes, and the lower valve is raised and admits acid from the carboy to fill the vacuum; pressure of the india-rubber bulb again expels its air which, acting at the surface of the acid now contained in the outer chamber, drives it into the inner chamber, and a repetition of the process continues the flow of acid until it runs from the nozzle. By removing the rubber bulb, it is impossible for any one to work the pump which, however, con-

* From the *Manufacturer and Builder*.

tinues to hold a charge of acid in each of its chambers ready for the next occasion for use. The acid, by an ingenious arrangement, comes in contact only with glass, the various parts of the pump being nicely ground to fit each other, and are kept in position by lead and elastic packing and screw rings of iron and brass. Liability to breakage appears to be very slight, the quantity delivered by the pump can be nicely measured, while its action is quite rapid, if desired. By attaching a long tube to the nozzle, the pump may be converted into a siphon, the action of which can be arrested by removing the india-rubber bulb, thereby admitting air to the outer chamber. Each variety of the pump is adapted to special purposes about which more can be learned by addressing the manufacturers.



A New Steam Atomizer.

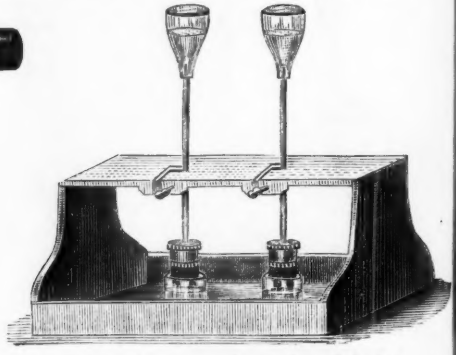
M. LUCAS CHAMPIONNIÈRE recently presented, at a meeting of the Société de Chirurgie, a steam atomizer constructed for him by M. Collin, of Paris, and calculated to take the place of the one adopted by Professor Lister, in forming a spray of carbolic acid solution.

The round boiler is heated by means of an alcohol lamp, which is guarded from the risk of setting fire to vapor of ether by a jacket of wire gauze. A catch (*E*) attaches the lamp to the bottom of the jacket. On the side of the boiler is a funnel for the introduction of water, which is closed by means of the plug (*C*). The level of the top of the funnel prevents the boiler being overfilled, and thus cause the boiling water to pass into the pipe for the escape of steam. At the top is a safety-valve. The steam pipe is provided with two branches, *A* and *B*, which are capable of being turned up or down from a vertical line, and an arrangement of the coupling obviates the need for a separate stop-cock, since the act of turning the jet upwards cuts off the escape of steam. A shield hinged to the extremity of the jet enables the form and direction of the cloud of spray to be modified.

The elastic tubes, which conduct the antiseptic solution from the reservoir below, are provided at their lower ends with filters of sponge. There are obvious advantages derived from the provision of two atomizing tubes, since it insures against accidental stoppage of the spray, or furnishes an increased volume of spray when this is desirable.—*Bulletin Thérap.*

Apparatus for Filtering Mercury.

ON page 173 of the present volume we gave a description of Lothar Meyer's apparatus for purifying mercury. Prof. Pfandler has recently constructed an apparatus for accomplishing the same purpose by filtration. The apparatus (see cut), of which there may be one or more sets, consists of an iron tube, to the upper end of which is cemented a pear-shaped glass vessel, intended to receive the impure mercury. The other end of the tube forms the upper part, or



cap, of the reservoir or receiver placed below. The neck of the latter has a screw-thread on the outside, on which a tight-fitting cap may be screwed, which latter forms part of the tube. Between the neck of the reservoir and the cap, a few discs of chamois leather are placed, when the cap is tightly screwed down. The mercury, by its own weight, passes through the leather in a fine spray, and is thereby thoroughly freed from dirt and other impurities mechanically mixed with it.—*Dingler's Polyt. Journ.*, Vol. 233, 42.

Sandal Wood.

DR. BERTHOLD SEEMANN, the eminent botanist, in calling attention to the commercial importance of sandal wood, remarks that "the trade in this fragrant wood has been going on since the dawn of history, and will probably not cease until the connection between sandal trees and idolaters, existing from time immemorial, shall have been broken up by either the one or the other becoming as extinct a race as the Archyopteryx, the Moa, or the Dodo. The religious

sentiment of millions of human beings is still intimately associated with this wood. When the Hindoo or Buddhist beholds its smoke curling heavenwards he feels that he has acted up to his religious duties, and that the perfume smelling sweetly in the nostrils of his deity will cover a multitude of sins."

Some of the most ancient records inform us of the prominent part played by the wood in India; and since the introduction of Buddhism into China, that country, destitute of sandal trees, has become the principal market for this important production. A piece of wood of the diameter of four to six inches is considered as the most acceptable offering a person can make to the idols of the temples. Large pieces are presented by the rich on particular occasions. The perfume of the sandal wood, which has been held in high esteem throughout tropical Asia for ages, is due to an essential oil residing chiefly in the heart of the tree and near the root, the outer parts of old trunks and young trees being almost destitute of scent. Hence the sandal cutters carefully remove the outer and generally lighter portion of the wood, which they term "sap." The oil is made upon the spot where the trees grow. It is wonderfully strong and penetrating, and is easily extracted, a pound of wood yielding about two drachms. In 1872–73, 10,348 pounds, valued at about 42,000, were imported into Bombay, from whence most of it was exported to other countries. The oil dissolved in spirits and sweetened with a little oil of rose forms the handkerchief perfume—"Extrait de bois de santal." From the fact that it mixes favorably with otto of rose it is often used for adulterating that article. Within a few years past the oil has been considerably used in medical practice in the treatment of gonorrhœa. It was once used, too, as a stimulant and sudorific, but is no longer employed for such purposes.

Sandal wood is the product of several species of the genus *Santalum*, of the natural order *Santalaceæ*. The genus is composed of about twenty members, spread over Asia, Australia, and Polynesia, and in habit is best compared with the myrtles. The most easterly species of the genus is *Santalum insulare*, found in the Marquesas Islands and Tahiti, where it is known as "eai," the southernmost, *S. Cunninghamii*, is found in New Zealand, and is known there as "maira;" the northernmost, *S. pyrularium* and *S. freycinetianum*, are natives of the Sandwich Islands, where they are called "lauala;" and the most westerly, *S. album*, is indigenous to the Indian Peninsula. All the species prefer dry, rocky localities, and, commercially speaking, degenerate in quality when they grow in moist places.

Santalum album and a marked, though inferior, variety known as *myrtifolium*, grow on mountains of continental India and the Indian Archipelago; Mysore, Malabar, and Canara being the principal districts. The tree usually attains a height of twenty-five feet, and when it is allowed to exceed these dimensions is generally found rotten at the core. After felling the trees the bark is removed at once, the trunks are cut into billets two feet in length, and these are buried in dry ground for about two months, during which time the white ants eat away all the outer wood without touching the heart. The latter constitutes the sandal wood of commerce. The billets are afterward smoothed and sorted. The deeper the color the stronger the odor, hence merchants often divide sandal into red, yellow, and white sorts. In general, also, the nearer the root the more powerful the perfume; care is therefore taken, by removing the soil, to cut as low down as possible.

The chips and fragments removed in the process of smoothing the billets and squaring their ends, and the smaller sized billets, suit the Arabian market best; and from these is distilled the essential oil so much esteemed in Turkey. The larger billets are sent to China, which affords the best market for this wood. In 1866 there were received at the various ports of the latter country 5,197 tons. The smaller billets are used in India. The reputation of sandal wood in Europe rests chiefly on its excellence as a material for carving, and it is manufactured into a great variety of elaborately marked card cases, work boxes, card trays, fans, walking sticks, etc. Dr. Hunter, some years ago, showed that it was admirably adapted for wood engravings. Some blocks yielded upward of 20,000 impressions without wearing out. The best wood for the engraver's purposes is the dark colored, five inches in diameter, grown on rocky soil

In old English works sandal wood is sometimes called "Sanders wood," but our present form "sandal" (which is the Arabic name for it), is more correct. The Chinese call the word "tan-heong" (scented tree); on the Malabar coast it is termed "chandana cotta," while the Polynesian species go by the generic name of "ahi," which in Fijian becomes "yasi;" in Eromangan, "nassau," and in Tanna, "nebissi."—*Scientific American.*

Phytolacca Decandra Wanted in Australia.—In a recent report on government plantations at Adelaide, South Australia, Dr. Schomburgk states that a great demand has arisen in that colony for the *Phytolacca decandra*, which is freely used by the homœopaths in the treatment of diphtheria.

Mahomedan Legend Respecting the Rose.—The Mahomedan tradition assigns the origin of the rose to the night of Mahomed's journey to heaven. The white roses sprang from the drops of sweat which fell from the blessed forehead of the prophet himself in the toilsome ascent; the sweat of Berak, the miraculous animal he rode, gave birth to the yellow ones, while the celestial drops which fell from Gabriel's were the source of the red rose.

RECENT PAPERS.

The probable Number of Elements.—Some years ago, Hugo Fleck* concluded that lime was not a simple alkaline earth, but a combination of a number of similar bodies, a conclusion which he based on a series of spectroscopic experiments. E. Cappell, who undertook the investigation of the same question, has lately published his results, which led him to the same conclusion.† The author dissolved equal quantities of different specimens of calcite (marble) obtained from various sources, in nitric acid, and compared the relative brightness of the δ line of calcium, while the same induction spark touched the solutions. Assuming the brightness produced by Carrara marble to be equal to 1, the figures obtained from a large number of other samples varied from 1.120 to 0.694. It was also found that, with increased age of the mineral, the brightness was augmented. From these and other observations the author concludes that the most characteristic spectral line of calcium, namely the line δ, *alone* represents an elementary body, which is present in varying quantities in different samples of the mineral, and he further concludes that the same argument must be applied to the other lines hitherto ascribed to calcium, namely that a decreasing brightness of one line naturally necessitates an increased brightness of another [meaning thereby that a certain sum of different bodies make up what we now understand under lime or calcium, and that if one of these is deficient in any one sample, another is proportionately increased]. The author concludes his paper with the following words: Extending these arguments to all so-called primary bodies, and abandoning the idea of their elementary condition, it appears most natural to assume *that the true number of elements is equally great as the number of metallic lines* (in the spectrum), and that each substance, in its elementary condition, is represented by *one*, and *only by one line.*—From *Zeitsch. f. anal. Chem.*, 1879, 466.

Ethereal Oil of Origanum hirtum.—(E. JAHNS.) The author desired to investigate the composition of the oil of origanum of the market, and, in his search after samples of duly authenticated origin, succeeded in obtaining from Gehe & Co., in Dresden, an oil which was derived from *Origanum hirtum* Link, the plant from which the firm distilled the oil being determined by Prof. Grisebach. This oil was reddish-yellow, slightly thick-fluid, of an aromatic odor like thyme, and of the sp. gr. 0.951. It was found to consist, to about one-half, of a phenol having the composition $C_{10}H_{14}O$, which the author identifies with *carvacrol*, and of one or several terpenes. It is supposed that the presence of carvacrol is a constituent of most of the essential oils of origanum. The reputed efficacy of the latter in carious toothache and in paralysis may perhaps be attributed to that constituent.—*Arch. d. Pharm.*, July, p. 1.

Oil of Origanum; its Varieties and Quality.—The author just mentioned also examined various commercial oils of origanum, and found those obtained from the east of Europe to be very rich in carvacrol, while those from southern France were quite deficient, or containing none at all. Greece and Asia Minor are mentioned as the chief sources of the Eastern oil. One variety, distilled in Trieste from raw material obtained from Chios, yielded nearly 80% of carvacrol. The French oils have a stronger odor of thyme, and sometimes also of turpentine.—*Ibid.*, p. 15.

Recovery of Platinum from Residues.—(E. DEVILLIER.) The author applies the well-known fact that alkaline formiates in alkaline solution reduce the double salts of platinic and alkaline chlorides. He directs, in the case of *filtrates* containing platinic chloride in solution in alcohol and ether, to first recover the latter by distillation. This already reduces a considerable amount of platinum. The residuary liquid is then mixed with an excess of soda, and finally with small quantities of sodium formiate, a little at a time, waiting each time until effervescence has ceased. Finally, the liquid is boiled for about fifteen minutes. It is then allowed to settle, the liquid is decanted off from the pulverulent metallic platinum, and the latter repeatedly washed with hot water containing hydrochloric acid, by decantation. The residuary platinum may then at once be reconverted into platinic chloride. Solid platinic chloride is best reduced by adding, say 10 grams of the salt, in small portions, to a boiling solution of 5 gm. sodium formiate and 5 gm. of soda solution (30° B.) in 100 cc. of water. Reduction is instantaneous, under effervescence, owing to the escape of carbonic acid gas.—*Comptes rend.*, 84, 444. *Zeitsch. f. anal. Ch.*, 1879, 461.

Removing Leeches.—W. B. SAUL states that the most simple and easy way of detaching leeches is to drop a few drops of camphor water on the part, and they will soon relinquish their hold.—*Pharm. Journ.*, June 28th.

The Alkaloids of Japanese Aconite Root.—(C. R. ALDER WRIGHT and A. P. LUFF.) The authors have extracted from Japanese aconite a crystallizable base, which they named *japaconitine*. This is present to the amount of about 0.08 per cent, and it is accompanied by about 0.17 per cent. of amorphous bases, constituting altogether about 0.25 per cent. Japanese aconite, therefore, contains about 3½ times as much alkaloid as the common aconite root, which latter contains on an average 0.07 per cent. The increased potency of the Japanese root is, therefore, probably due more to a larger proportion of alkaloid than to its greater power.—*Journ. of the Chem. Soc.*, July.

The Alkaloids of the Veratrums.—C. R. ALDER WRIGHT.) The author thus summarizes the results of his investigations on the alkaloids of the medicinal Veratrums:

I. Veratrum Sabadilla Retz. The seeds, Cevadilla or Sabadilla-seeds, contain the following alkaloids:

1. Cevadine (veratrine of Merck), $C_{32}H_{49}NO_9$, yielding cevadic, methylcrotonic, or tiglic acid on saponification.
2. Veratrine (of Couerbe), $C_{37}H_{53}NO_{11}$, yielding veratric (dimethylcatechuic) acid on saponification.
3. Cevadilline (in small quantity), $C_{34}H_{53}NO_8$.

II. Veratrum album L., white Hellebore Roots contain:

1. Veratrine, only in small quantity; to this are due the sternutatory powers of the root.
2. Jervine (of Simon), $C_{26}H_{37}NO_3$; not saponifiable; crystallizable.
3. Pseudo-jervine, $C_{29}H_{43}NO_7$; not saponifiable; crystallizable.
4. Rubi-jervine, in small quantity, $C_{26}H_{43}NO_2$; not saponifiable, crystallizable.
5. Veratralbine, approximately $C_{25}H_{42}NO_5$; not saponifiable; amorphous.

III. Veratrum viride Ait., Green or American Hellebore Roots contain:

1. Veratrine, only a trace.
2. Veratralbine, only a trace.
3. Rubi-jervine, only a minute quantity.
4. Jervine.
5. Pseudo-jervine } (see above).
6. Cevadine

To the latter is due the sternutatory action; cevadilline is absent.—*Journ. Chem. Soc.*, July, 426.

On Tannate and Sulphate of Pelletierine.—(DR. BERENGER FERAUD.) The author reports his experience with the tannate and the sulphate of *pelletierine* (the alkaloid found by Tanret in pomegranate root bark) as a tænicide.

The tannate is best administered either in *one* dose, of 0.40 gm. (ab. 6 grains); or in two divided doses, first of 0.10 gm. (1½ gr.), and afterwards of 0.40 gm. (ab. 6 grs). These doses should not be much exceeded. The tænifuge is to be followed by a purgative, such as castor oil,

* *Zeitsch. f. anal. Chem.*, XI., 73. † *Naturforscher*, XII., 29.

or preferably tincture of jalap (30 gm. or 1 fl. oz). In at least 12 cases out of 14, the success was complete.

The sulphate has not been found as successful.—*Bull. Gén. de Thérap.*, 97, 8.

Explosive Compound of Phosphorus.—R. PROCTER points out the risk incurred by keeping, for any length of time, a solution of phosphorus in carbon disulphide. The walls of the vessel become covered, in the course of time, with an orange-yellow substance, which, on the accidental fracture of a bottle, causes a violent explosion. —*Chem. News*, 1879, 245.

Treatment of Coryza.—(DR. LE GAREC.) The author states that he has obtained the most beneficial results from the following preparation:

℞ Potassii chloratis.....	16 gr.
Sodii boratis.....	8 gr.
Catechu, pulv.....	1½ gr.
Infus. Adianti cap. Ven. fol.....	3 fl. oz.
Decoct. Althææ rad.	1½ fl. oz.
Spir. limon.....	1 drop.

Prepare the infusion of maidenhair (*Adiantum Capillus Veneris* L.), and the decoction of marshmallow root (*Althæa officinalis* L.), each from 1 drachm of the substance. Mix them, dissolve in the mixture the salts and add the catechu; then filter and add the spirit.

The mixture is diluted, for use, with hot water, so as to produce a slightly warm liquid, which is to be snuffed up the nostrils as far back as possible; two or three applications are sufficient. Afterwards it is important to wait as long a time as possible, before blowing the nose. In the beginning of coryza this is quite effective; its effects are fully realized in from six to twelve hours.—*La Ruche Pharm.*, 1879, July.

Tincture of Belladonna externally for Night-Sweats.—(MAIRNE.) The author has for some time past used the tincture of belladonna as a lotion for arresting the excessive night-sweats of consumptives, and always with marked benefit. Indeed he found this agent superior to all others; if it was used beforehand, the sweat failed to break out; if applied during the sweating, the latter immediately diminished or was suppressed. Two tablespoonfuls of the tincture (one of leaves in five of tincture made with alcohol of 60%) mixed with an equal quantity of alcohol is sufficient to sponge the whole body, and to produce the desired effect.

The author has also used this method in a few cases of scarlatina. Further confirmation of the author's results is desirable.—*Enciclop. Médico-Farmac.*, 1879, p. 245.

Heavy Oil of Wine.—ERNST HARTWIG has examined this substance (officinal in the U. S. Ph.), which is produced by the action of sulphuric acid on alcohol, and generally during the process of etherification. By careful fractional distillation he has succeeded in separating it into numerous fractions, several of which unite with acid alkaline sulphites. From these portions he has isolated a keton, having the empirical formula $C_8H_{16}O$.

P. CLAESSON finds that the so-called heavy oil of wine consists mainly of ethyl sulphate.—*Journ. f. pract. Chem.*, 19, 176; 260.

Therapeutic Use of Eserine in Glaucoma.—DR. M. LANDESBERG publishes in the Philadelphia *Medical Times* the conclusions at which he comes after trial of eserine in glaucoma. He says: "The continuation of my experiments with the new remedy did not answer the expectations aroused first by my own successes and by the praises given by Langueur and Weber. A permanent cure was in no instance observed; the primary improvement was always followed by relapses with more severe symptoms of irritation and with more pronounced impairment of vision.

"In regard to the extravagant hopes with which the new remedy was hailed here and there by the profession, that instead of an unreliable operative procedure we have at last succeeded in gaining a sure remedy against one of the most insidious diseases, a remedy which every practitioner may use," he feels called upon, after the publication of the previous cases, to give the after-history of those cases, and says: "I must regard eserine, not only as an unreliable and in most cases worthless remedy in glaucoma, but also as a very dangerous one, which by its primary results may lull both the physician and the patient into a delusive security, endangering, thus, the favorable chances of another and more efficacious therapeutic procedure."

Commercial "Fruit" Jellies.—The fruit-jellies commonly wholesaled throughout the country, at about seventy cents per dozen, are pretty well understood to be composed of animal and not of vegetable substances. A story was once current that the consumption of cattle-hides in the manufacture of jelly in London was so great as to cause a sharp advance in the hide market. Such an effect could hardly be produced at the present time, however, since merchantable hides can be made to yield more money in the form of leather than in jelly.

The jelly manufactured in Boston is nearly all made of apples, and sells at about fourteeen cents per pound. Apple now forms the basis of an endless number of jellies made by simply adding extracts to flavor the apple-jelly, and so perfect is the resemblance that the great majority of consumers cannot distinguish it from the genuine. Real currant jelly costs somewhere about twenty-eight cents per lb. and is made to only a very limited extent.—*New England Grocer.*

Phosphate of Potassium as a Condiment.—PROFESSOR GALLOWAY proposes the use of phosphate of potassium as a condiment, especially where much salt meat is eaten. He points out that this substance is largely extracted from meat in the process of salting, and considers it to be evident that it ought to be replaced in order to give to salt meat its proper nutritive value. He also suggests that phosphate of potassium would be more useful than lime juice in the prevention of scurvy.

Officinal Alcohol as a Stimulant.—DR. D. C. LEVENWORTH of New Haven, Ct., in a communication to *the Medical and Surgical Reporter*, endeavors to show that by prescribing officinal alcohol, properly diluted, we can meet the various necessities of our patients in a better, safer, and more certain way than by the present form of prescribing alcoholic stimulants in the form of brandy, whiskey, etc., the exact composition of which is always more or less doubtful, and a taste for which is too frequently acquired from their continued use.

Novel Remedy for Hay-fever.—DR. C. M. SEBASTIAN, of Martin, Tenn., has employed a close veil, such as worn by ladies, to exclude floating pollen and other atoms which precipitate an attack of hay-fever in persons subject to it, and has thereby prevented the recurrence of the distressing symptoms of the malady. — *Medical Herald*, Aug.

Duboisia as a Mydriatic.—WM. F. NORRIS, of Philadelphia, in the *American Journal of the Medical Sciences*, gives a brief résumé of the literature relating to this remedy, and gives a number of cases in which he tested its mydriatic effects upon human subjects, and its poisonous effects upon animals. Respecting its therapeutic value, he thinks them similar to (though more active than) atropia. As a mydriatic it is more prompt in action than atropia, and the dilatation of pupil and paralysis of of accommodation pass off more rapidly than when produced by atropia, rendering it more useful than the latter in determining refraction. On the other hand, it is more apt than atropia to produce constitutional disturbance, and, therefore, requires more caution in its use. Nearly every patient, into whose eye a four-grain solution had been dropped, soon complained of dizziness, although dryness of the throat, such as may follow the use of atropia, does not occur. Unlike atropia, it showed no tendency to produce conjunctivitis.

Internal Use of Quinia in Cystitis.—D. B. SIMMONS, of Yokohama, Japan, gives doses of 12 grains of quinia sulphate, in perfect solution, at intervals of four hours, with the effect of greatly relieving the symptoms of chronic cystitis.—*Am. Journ. of Med. Sci.*

ASSOCIATION REPORTS.

AMERICAN PHARMACEUTICAL ASSOCIATION.

TWENTY-SEVENTH ANNUAL MEETING.

THIS Association met in the Supreme Court Room, at Indianapolis, Ind., on Tuesday, September 9th, 1879. The attendance of members was very large, and especially so from the West.

The meeting was called to order at 3 o'clock by President Gustavus J. Luhn, of South Carolina. Mayor John Caven being introduced, delivered a welcoming address. His Honor reviewed at some length the advancing strides of pharmaceutical science and the steadily increasing mastery of mind over matter through the investigations and progress of modern science. President Luhn thanked the Mayor and citizens of Indianapolis for their hospitality and generous greeting, after which he appointed as a

COMMITTEE ON CREDENTIALS

Messrs. Albert E. Ebert, of Illinois; J. Roberts Baker, of Virginia, and J. L. Lemberger, of Pennsylvania. The Committee having retired, President Luhn delivered his

ANNUAL ADDRESS.

He alluded to the cause of delay in the publication of last year's proceedings; to the valuable contributions which that volume contains, and suggested that future meetings, at the South, be held earlier than the month of September. He called attention to the deficiency in the treasury, and recommended a rigid economy in all departments of the Association. He called upon members to come forward more promptly in subscriptions to the Centennial Fund, asking that the generosity of the citizens of Philadelphia be met in the proper spirit, so as to secure this fund for stimulating investigation. He spoke of the growth of the Association, of its pharmaceutical and other labors benefiting its members and the profession at large, as well as fostering a social relationship between the members of the profession.

At the conclusion of the address,

INVITATIONS

were received to visit the Public Library, benevolent institutions, and various industrial establishments and places of interest in the city and vicinity. On motion of Dr. H. J. Menninger, the following were invited to attend the sessions of the Association: the faculties of the Medical College of Indiana and of the Central College of Physicians and Surgeons, the Marion County Medical Society, the Indianapolis Lyceum of Microscopy, and the resident members of the State government.

President Luhn announced the following committees: On Invitations: Messrs. J. M. Good, of St. Louis; C. W. Hancock, of Philadelphia, and F. M. Harper, Madison, Ind. On President's Address; J. Roberts, Baltimore; E. H. Sargent, Chicago, and C. F. Hildreth, New Hampshire.

DELEGATES.

The Committee on Credentials reported the following organizations as properly represented:

COLLEGES OF PHARMACY:

New York: Dr. H. J. Menninger, Mr. Chas. Rice, Prof. Peter W. Bedford, and Messrs. Starr H. Ambler and Julius Jungmann; *Philadelphia:* Messrs. Charles Hancock, Jas. L. Patterson, Chas. C. Spanagel, Alonzo Robbins, and Chas. L. Eberle; *Chicago:* Messrs. E. H. Sargent, H. D. Garrison, Adolph Vogeler, R. H. Cowdrey, and S. L. Coffin; *Cincinnati:* Messrs. John F. Judge, George Egger, Jos. H. Teemster, J. D. Wells, and T. L. A. Greene; *Massachusetts:* Messrs. Samuel A. D. Sheppard, A. R. Bailey, Benj. O. Wilson, Geo. F. H. Markoe and Sam'l Colcord; *Louisville:* Messrs. Vincent Davis, John Colgan, C. Lewis Diehl, August Knoffel and H. H. Rademacher; *Maryland:* Messrs. Louis Dohme, Fred'k Hassenkampf, Jos. Roberts, Wm. Silver Thompson and Sam'l Mansfield; *St. Louis:* Messrs. Wm. H. Crawford, Jas. M. Good, C. F. Meyer, Enno Sander, and Wm. L. Plummer; *Ontario:* Messrs. Edward Harvey and Wm. Saunders.

PHARMACEUTICAL ASSOCIATIONS.

Connecticut: Messrs. Stephen Goodrich, Thos. F. Main, Dwight Phelps, W. A. Thompson, and Emil Gessner; *Georgia:* Messrs. John Ingalls, J. M. Solomon, and J. W. Rankin; *New Hampshire:* Messrs. Chas. H. Tufts, Chas. S. Eastman, John A. Wiley, Chas. F. Hirdworth, and Geo. F. Underhill; *Pennsylvania:* Messrs. Chas. A. Heinitsh, Dr. Geo. Ross, Jos. L. Lemberger, Sam'l Gerhard, and Geo. A. Kelly; *Kentucky:* Messrs. W. H. Averil, John J. Frost, Peter Nadler, W. T. Courtney, and R. H. Venable; *Ohio:* Messrs. C. W. Tobey, Chas. Huston, J. U. Lloyd, T. J. Casper, and O. S. Wenthoff; *New York:* Messrs. Frank F. Knapp, Wm. H. Rodgers, Hiram E. Griffiths, Wm. Blackie, and Julius Jungmann; *South Carolina:* Messrs. A. W. Eckel, C. O. Michaelis, C. F. Panknin, B. F. Moise, and E. H. Kellus; *Richmond:* Messrs. T. Roberts Baker, Hugh Blair, John B. Purcell, Henry Bodeker, and Jos. N. Willis; *Kings Co., N. Y.:* Messrs. Dr. E. R. Squibb, L. E. Nicot, Geo. Baker, Geo. C. Close, and Wm. Davis; *Texas:* Messrs. J. G. Campbell, L. M. Connor, J. M. Bolie, Joseph Blake, and John B. Willis; *German Apothecaries', New York:* Dr. H. J. Menninger.

ALUMNI ASSOCIATIONS.

Chicago: Messrs. A. G. Vogeler, Thos. Whitfield, and J. M. Goodman; *St. Louis:* Messrs. Fred'k F. Reichenbach, Chas. Giestner, and H. Stranniger; *New York:* Messrs. Theob. Frohwein, Thos. F. Main, Peter W. Bedford, J. W. Ballard, and J. L. Galin; *Cincinnati:* Messrs. A. W. Baine, Theod. Bange, Chas. Ferris, E. Goodman, and J. H. Teemster; *Philadelphia:* Messrs. Edw. Jones, Wm. McIntyre, Dr. A. W. Miller, Geo. W. Kennedy and Lewis C. Hoph; *Massachusetts:* Messrs. Thos. Doliber, Lewis Cass, Charles Parker Orney, Chas. A. Tufts, and Frank A. Davidson; *Louisville:* Messrs. John F. Rudell, O. A. Backmann, and Otto Mueller.

NEW MEMBERS.

The following gentlemen, being proposed and properly vouched for, were then elected members: Wm. H. Underhill, Haverhill, Mass.; F. W. Pierce, Chester, Vt.; E. C. Winslow, Danville, Ill.; Rob. H. Walsh, Phila.; James F. Hurt, Columbia, Mo.; Alfred H. Hoffeld, New Albany, Ind.; Wm. H. Peirce, Boston, Mass.; E. W. Shedd, Edgar H. Luce, Austin E. Wallace, B. F. Davenport, M.D., E. S. Wood, M.D., Chas. W. Wells, Thos. F. Goodale, of Boston, Mass.; C. P. Aimar, Charleston, S. C.; Alfred B. Huested, Albany, N. Y.; Charles H. Gans, Louis Santher, and H. M. O'Neil, Albany, N. Y.; Wm. P. De Forrest, Brooklyn, N. Y.; J. A. Miller, Gloversville, N. Y.; John A. Nipgen, Chillicothe, Ohio; T. G. Bissel, Waterville, N. Y.; Wm. W. Tooker, Sag Harbor, N. Y.; F. M. Brooks, Baton Rouge, La.; H. P. Napier, Owego, N. Y.; Julius Rieffenthal, Buffalo, N. Y.; C. M. Lyman, Buffalo, N. Y; Geo. F. Dinsmore, Worcester, Mass.; Hermann Nienstadt, Dubuque, Iowa; Geo. W. Brooks, Brooklyn, N. Y.; Reinhold Van der Emde, New York; A. J. Rozezlawski, New York; T. B. Wood, Lexington, Ky.; Geo. C. Frye, Portland, Me.; Geo. Merrell, Cincinnati, Ohio; W. P. Campbell, Cumberland, Md.; A. D. Griffith, Oil City, Pa.; R. H. Van Sant, Astoria, L. I.; Geo. A. Ferdinand, Dubuque, Iowa; A. L. Lengefeld, M.D., San Francisco, Cal.; M. H. Webb, Simpsonville, Ky.; A. B. Buck, Anderson, Ind.; John R. Gorham, Newburgh, N. Y.; John E. Goff, Boston, Mass.; John A. Lambert, Indianapolis; David Hill, Lafayette, Ind.; James A. Riddell, Aurora, Ind.; Jacob Bauer, Terre Haute, Ind.; Abner Thorp, Cincinnati, Ohio; Chas. Haust, Cincinnati, Ohio; C. S. N. Halberg, Chicago, Ill.; Sam'l H. Smith, Winston, N. C.; Wm. Blaikie, Utica, N. Y.; Alex. C. Bell, Chicago, Ill.; H. J. Schaeffer, Evansville, Ind.

The names of the various Colleges and Societies being called, the following gentlemen were named as a

NOMINATING COMMITTEE

for the selection of officers for the ensuing year:

From Colleges of Pharmacy.

New York, Julius Jungmann; *Philadelphia*, Chas. W. Hancock; *Massachusetts*, G. F. H. Markoe; *Louisville*, V. Davis; *Maryland*, Jos. Roberts; *St. Louis*, J. M. Good; *Chicago*, E. H. Sargent; *Cincinnati*, T. L. A. Greve; *Ontario*, Wm. Saunders.

From Pharmaceutical Societies:

Connecticut, E. A. Gessner; *Texas*, J. G. Campbell; *Georgia*, Jas. Ingalls; *Richmond*, T. R. Baker; *New Hampshire*, C. A. Tufts; *South Carolina*, A. W. Eckel; *Pennsylvania*, Geo. Ross, *New Jersey*, H. P. Thorn; *Kentucky*, W. H. Averill; *Ohio*, T. J. Casper; *New York*, Wm. Blaikie; *German Apothecaries'*, *New York*, Dr. H. J. Menninger. From the Association at large: C. E. Ferris, Ind.; F. H. Butler, Mass.; R. W. Gardner, N. J.; E. Bocking, W. Va.; and G. A. Newman, Ky.

Alumni Associations.

Chicago, A. G. Vogeler; *St. Louis*, F. Reichenbach; *New York*, T. F. Main; *Cincinnati*, J. H. Teemster; *Philadelphia*, Dr. A. W. Miller; *Louisville*, F. A. Davidson; *Massachusetts*, F. A. Davidson.

The Chairman of the Executive Committee, Mr. Geo. W. Kennedy, then presented his report. From it it appears that the

MEMBERSHIP OF THE ASSOCIATION

is as follows: Number of members at last report, 1,125; elected at last meeting, 56; delegates of Societies, 7; total new membership, 63. The losses of membership were 82, being 8 by death, 61 who were dropped from the roll, and 13 by resignation. The deaths during the year were, *Benjamin Lyman*, of Montreal; *John M. Merrick*, Boston, Mass.; *Christopher H. Kolb*, Philadelphia; *Dr. Geo. B. Wood*, Philadelphia; *T. T. Foley*, Houston, Texas; *Dr. Wm. H. Griswold*, North Adams, Mass.; *Fred'k V. Heydenreich*, Brooklyn, N. Y.; *Leon Cherot*, St. Louis, Mo.; *Alfred Preston*, Portland, Me.

The following were appointed

A COMMITTEE TO REPORT UPON SPECIMENS

on exhibition: Professor H. W. Garrison, Chicago; C. C. Spannagel, Philadelphia; J. B. Dill, Indianapolis; A. R. Bayley, Mass., and Emil L. Boerner, Iowa. Prof. Markoe offered an amendment to the By-Laws providing that the President elect shall assume his duties at the last session of the year in which he may have been elected, instead of at the second session, as now provided. Action was postponed in accordance with the rules. The Association then adjourned to meet at 9 o'clock on Wednesday morning.

SECOND DAY.—*Morning Session.*

The Association was called to order Wednesday, Sept. 10th, 1879, at 9 o'clock A.M. The minutes of the previous meeting were read and adopted.

NOMINATIONS.

The Nominating Committee having presented its report, an election was held with the following result:

President, Geo. W. Sloan, of Indiana.
First Vice-President, T. Roberts Baker, of Virginia.
Second Vice-President, Jos. L. Lemberger, of Pennsylvania.
Third Vice-President, Philip C. Candidus, of Alabama.
Treasurer, Charles A. Tufts, of New Hampshire.
Permanent Secretary, John M. Maisch, of Pennsylvania.
Reporter on Progress of Pharmacy, C. Lewis Diehl, Kentucky.

STANDING COMMITTEES.

Executive.—George W. Kennedy (*Chairman*), Pottsville, Pa.; Wm. Silver Thompson, Baltimore, Md.; Thos. J. Casper, Springfield, Ohio; A. W. Miller, Philadelphia, Pa.; and John M. Maisch, *Permanent Secretary, ex officio.*

Committee on Drug Market.—Louis Lehn (*Chairman*), New York; H. W. Fuller, Chicago; B. F. Moise, Charleston, S. C.; Jas. G. Steele, San Francisco; Solomon Carter, Boston.

Committee on Papers and Queries.—John U. Lloyd (*Chairman*), Cincinnati, Ohio; Robert H. Cowdrey, Chicago; Charles Mohr, Mobile, Ala.

Business Committee.—Dr. H. J. Menninger (*Chairman*), Brooklyn, N. Y.; Charles L. Eberle, Philadelphia, Pa.; Eli Lily, Indianapolis, Ind.

Committee on Prize Essays.—C. Lewis Diehl (*Chairman*), Louisville, Ky.; John F. Judge, Cincinnati, Ohio; Emil Scheffer, Louisville, Ky.

Committee on Legislation.—John M. Maisch, Philadelphia, Pa.; Jesse W. Rankin, Atlanta, Ga.; Sam'l A. D. Sheppard, Boston, Mass.

The President then appointed Messrs. Gordon, of Ohio, and Ross, of Pennsylvania, a Committee to conduct the President and Vice-Presidents elect to the platform. Mr. Luhn, on retiring, thanked the Association for the aid rendered him, and introduced Mr. Geo. W. Sloan, who took the chair, addressing the Association appropriately. The Vice-Presidents being called on severally, addressed the Association briefly.

PRESIDENT GEORGE W. SLOAN.

[MR. GEORGE W. SLOAN, the recently elected President of the American Pharmaceutical Association, is a native of Pennsylvania, having been born there June 28th, 1835. At a very early age, however, he moved with his parents to Indianapolis, where he has ever since resided. His uncle, David Craighead, was one of the early druggists of Indianapolis, and George being more or less about his store, began to show a strong predilection for the study of the mysteries and miracles of chemistry, and upon the completion of his education went at once into the drug business in his uncle's store, where he has been ever since, as apprentice, prescription clerk, and partner, the present firm being Browning & Sloan. He graduated at the Philadelphia College of Pharmacy in the class of 1856–57. Mr. Sloan's enthusiasm in the study as well as practice of pharmacy led to his being acknowledged at a very early period in his professional life, as the leading chemist and pharmacist of his own State, and he was generally consulted when questions of doubt and difficulty had to be encountered.]

SECRETARY'S REPORT.

The permanent Secretary read his annual report. After stating the causes which led to the delay in the publication of last year's proceedings, he made acknowledgment to the publishers of "NEW REMEDIES," for the aid rendered through the loan of wood-cuts, etc. The expenses of publishing the proceedings for the past year were $3,823.42, exclusive of Treasurer's salary. The Secretary gave an account of the "back-volumes" of proceedings on hand. He called attention to the neglect of Delegates to furnish the names and addresses of the officers of the bodies they represent. He alluded, also, to the financial affairs of the Association, and made several suggestions for the future, among which was that an authorized agent for the collection of dues be appointed for every city or locality where three or more members reside. The Secretary expressed himself in favor of the amendments proposed by the *Committee on Ways and Means*. The report was accepted and ordered to take the usual course.

THE TREASURER'S REPORT

Was presented and read by that officer. The receipts of the year amounted to $5,711.43; the expenditures to $4,730.45; leaving a balance on hand of $980.98. The report was referred to the Auditing Committee.

THE REPORT ON DRUG MARKET,

By MR. WM. H. WICKHAM, of New York, and MR. JAS. G. STEELE, of San Francisco, was read in part by the Secretary. Mr. Wickham reported that the drug trade during the past year showed an increase in comparison with the previous twelve months, and the results of business had been generally more satisfactory to both jobbers and retailers, especially during the last half of the year. The Committee traced this improvement to the better tone of confidence inspired by the financial situation and the general impression that values had reached the lowest ebb. It asserted its belief of an unusual activity this fall, based upon the exceedingly large estimates of crops in nearly every section of the country. The number of failures in the trade was less than usual, and their importance was inconsiderable. Prices, during the last four months of the fiscal year, exhibited a hardening tendency, and the advances have been since maintained. The report spoke of the passage of the McKenzie quinine bill which placed that drug on the free list. The exports of drugs were somewhat larger than during the previous year, the increase being chiefly in the trade with Central and South America and Australia. The tariff laws of Canada have lessened our trade with our neighbors. This report also gave, in tabular form, a statement of the ruling prices in New York, for each month of the fiscal year, of some of the principal staples.

The report of Mr. Steele on the market of San Francisco was very voluminous, being probably the largest report of the kind ever presented to the Association. He reviewed the trade in medicinal plants of California; detailed foreign imports from various countries; gave ruling prices during the year for leading drugs; imports of drugs and chemicals, giving amount and value. He devoted much space to the native products of his State; giving also an account of the mineral springs. He also gave an account of the manufactures of his section, notable among which was that of 25,000 gallons of castor oil per annum. He likewise devoted much space to a review of exports, together with a price-list of leading drugs.

REPORT ON THE PROGRESS OF PHARMACY.

PROF. C. LEWIS DIEHL then read an abstract of his report, giving a full review of the various branches of pharmaceutical art and science. This report is very valuable in all its parts, and space will not permit us to give it more than passing notice at this time.

COMMITTEE ON BY-LAWS.

A Committee on proposed amendments to By-Laws made report. The subject was made a special order for Thursday afternoon. The Association then adjourned to meet at 3 P.M.

SECOND DAY.—*Afternoon Session.*

The minutes of the previous session were read and approved. In compliance with a resolution that the Chair appoint an official reader, Professor Remington, of Philadelphia, was appointed to that position.

PROF. JOHN M. MAISCH presented and read the

REPORT OF THE COMMITTEE ON LEGISLATION.

From it we learn that during the past year two pharmacy acts have been passed, one amending the law passed for the State of New Jersey in 1877, the other regulating the practice of pharmacy in the County of Kings (City of Brooklyn), N. Y.

ANSWER TO QUERIES

Being called for, Nos. 1, 2 and 3 were continued.

MR. CHAS. MOHR forwarded and Prof. Remington read an answer to *Query No.* 4. "Eriodictyon Californicum is receiving attention for its action in lung diseases and bronchial affections. What is its therapeutical value and to what is its activity due? Make a chemical examination of it."

Mr. Mohr has made a very careful examination and analysis, the various steps of which he describes in detail. The result is given both quantitative and qualitative. His conclusion is that the therapeutical value of the plant rests solely upon its stimulating and adstringent effects upon the mucous membrane of the respiratory apparatus, especially the bronchial tubes, due to the action of a brittle acrid resin exciting secretion and promoting expectoration. Mr. Mohr doubts the superior qualities ascribed to this remedy in the "land of Yerba Santa" and reports the trial and final rejection of the remedy by a physician of his acquaintance.

Query No. 10. Answered by MR. GEO. W. KENNEDY. "Should not the fluid extract and syrup of Senega be prepared with an alkaline menstruum?"

The writer, after various experiments, recommends a menstruum of one part of water of ammonia in 82 of dilute alcohol for fluid extract and syrup. He claims as advantages of the preparations thus made that they never gelatinize nor have a precipitate; that they remain clear, and that the product will be found to be decidedly more acrid and stronger.

In reply to *Query No.* 13, MR. P. C. CANDIDUS presented a very carefully prepared paper giving statistical results. The Query is: "On dissolving solids in water or other liquids, a change of bulk is generally produced, consisting, in nearly every case, of an increase in volume. It is desired to work out a table of the changes of bulk produced by dissolving definite quantities of officinal solids in definite quantities of menstrua." The result cannot here be published, as it is almost entirely tabular. Mr. Candidus' experiments embrace about 50 substances examined and he gives of each the quantity in grams, the menstruum at C. 15.55 (60 Fahr.), quantity used and the increase.

MR. J. U. LLOYD'S reply to *Query No.* 19, "An Essay on the Conditions necessary to successfully conduct Percolation" was read by Professor Remington. This paper is very exhaustive and was listened to with great attention. A discussion thereon was participated in by Messrs. Remington, Maisch, Markoe, Eberle, Lloyd, Campbell and Menninger. Mr. Lloyd, first speaking of the difficulty experienced in practical work, and the natural laws to be considered, in view of the probability of errors in manipulation, and oversight, perhaps, of important natural influences. The writer requested the privilege of changing his present views whenever testimony warranting the same could be obtained.

Thanks were extended to Mr. Chas. Mohr for criticisms of the manuscript, and to Prof. T. M. Crawford, for a review of the mathematical part of the first portion. Commencing with solution and governing laws, maceration

and the connection of the same with percolation was discussed. Regarding percolation the author concludes that, even with like amounts of material identical in composition, great differences in result arise from employment of various-sized percolators, and other causes dependent upon influence of natural laws that must be considered. Tables were introduced which bore upon the subject from a mathematical and practical point. Finally Mr. Lloyd concluded by bringing his argument to the influences exerted by powders of various degrees of fineness, at which point the matter was permitted to rest.

At the conclusion of the discussion on his paper, a unanimous vote of thanks was tendered to Mr. Lloyd for the ability and patient labor which the work evince.

MR. W. T. FORD offered a volunteer paper on "Medicinal Preparations from Herbs" which, after being read by Prof. Remington, was referred by the Executive Committee.

Query No. 24. "The Affinity of Glycerin for Water is well known; to what extent will officinal glycerin attract moisture on being exposed to a damp atmosphere?" was answered by Mr. G. W. Kennedy, who found that the absorption of water ceases after a while. He also found that 1,000 grains of glycerin exposed to dampness in a cellar absorbed 40 grains or about 4 per cent of water in four days. Mr. Kennedy had not yet finished his experiments, and the subject was continued to him.

In reply to *Query No.* 17, MR. HENRY S. WELLCOME made verbal report. He said he had not been able to find "any drugs now cultivated here which were formerly obtained from foreign countries" with perhaps the exception of valerian now cultivated in Vermont.

DR. MENNINGER, on behalf of the business committee, asked an expression of opinion as to whether the Executive Committee had, under the By-Laws, the power to reject from publication such papers as they might think unfit and unworthy of that distinction. Dr. Menninger was of opinion that the Committee have that privilege and hoped it would be exercised when necessary. The debate on the subject was participated in by Messrs. Markoe, Ebert, Remington, Wellcome, and Menninger. The Association then adjourned to meet at 9 o'clock on Thursday morning.

THIRD DAY.—*Morning Session.*

The Association met at 9 o'clock, President Sloan in the chair. After the transaction of routine business, Mr. Saunders, of London, Ontario, read a reply to query No. 15, on "The Preparation of Infusions and Decoctions from Fluid Extracts," showing that when fluid extracts are prepared with diluted alcohol, infusions and decoctions, as a rule, may be satisfactorily made from them, but, in the case of alcoholic fluid extracts, such as buchu, valerian, etc., the resulting infusions are so turbid as to be unsightly and objectionable, even after repeated filtration. The writer suggested the reduction of the alcoholic strength of those extracts, so as to obviate this difficulty. The "Decoctions" of the U. S. P., it was urged, could invariably be made more satisfactorily from the officinal fluid extracts.

MR. REMINGTON offered an amendment to Art. II., Chapt. 6 of the By-Laws. It provides that the names of applicants for membership shall be presented at one session and voted upon at the next; that the Executive Committee shall report upon their fitness, and that a two-third vote shall elect. This amendment was subsequently adopted.

The Committee appointed to consider recommendations contained in the reports of the Secretary and Treasurer, presented its report. The Committee recommends the following amendments to the By-Laws:

1. That in each locality where three or more members reside a local agent shall be appointed, whose duty it shall be to collect annual dues.

2. That all delegates be required to pay the regular initiation fee.

3. That the Executive Committee be requested to reduce, as far as possible, the volume of the annual proceedings.

4. That the Secretary be empowered to sell such proceedings as in his judgment seems best.

5. That the Treasurer present annually a tabulated statement of all receipts and expenditures.

6. That the fiscal year begin January 1st, instead of September 1st.

DR. MENNINGER moved the appointment of Prof. Remington to formulate the several proposed amendments to the By-Laws. Carried.

The *Auditing Committee* reported that they had examined the Treasurer's report, and found it correct, which was concurred in.

REVISION OF THE U. S. P.

PROF. C. LEWIS DIEHL, in the absence of Dr. Chas. Rice, Chairman of the Committee on the Revision of the Pharmacopœia, presented a voluminous report of progress. After recounting some of the difficulties which have beset the Committee, Mr. Rice says: "Two years ago, this Association undertook the experiment of preparing a complete pharmacopœia, which was to be laid before the Association at this present meeting. Some were sanguine enough at that time to hope that this plan could and would be carried out; others, better remembering how such promises are apt to be kept, expressed doubts as to the ultimate success. The undersigned, although he had previously had ample experience that promises and pledges are not always fulfilled, still believed, in seeing so much enthusiasm and zeal among the members of the Association, that he had strong hopes of ultimate success. To-day, he is compelled to acknowledge that his anticipations were not fulfilled in the manner expected. But he is happy to state that the prophecies of the other side, as to complete failure, are likewise unfulfilled. If the Committee had accomplished no more than to keep alive the interest in the forthcoming revision of the U. S. P., its existence would not have been in vain. But the results are, indeed, much greater, though not all in a condition to be laid before the Association at this meeting."

Mr. Rice then defined the plan of the Committee in the performance of its arduous task; he showed how the work has been divided and distributed among the members of the committee.

COMMITTEE ON BUSINESS.

PROF. REMINGTON moved the appointment of a committee to report at some future session upon the feasibility of having the routine business of the Association entrusted to a business council or committee. Carried.

DR. ROSS, of Pennsylvania, moved that the report of the Committee on the Revision of the Pharmacopœia be printed in pamphlet form, provided the expense of printing would be borne by the colleges and societies represented in the Association.

After some discussion, during which several delegates pledged the support of their respective institutions, the resolution was adopted.

MR. HENRY S. WELLCOME read a volunteer paper on THE CINCHONAS OF SOUTH AMERICA, relating his personal experiences in visiting the "bark" forests. He described the method of gathering, transporting to market, etc.; he also described the manner of assorting and sophisticating.

The Committee on President's Address reported their approval of recommendations, but found it inexpedient to act upon them at this time.

MR. WM. P. WENZELL, of San Francisco, contributed an exhaustive article on DILUTED ALCOHOL. (See page 294 of this number.)

The contributions of Dr. Hoffmann, Mr. J. U. Lloyd, and Prof. Remington, all of the Committee on Revision of the Pharmacopœia, were read and appropriately referred.

PROF. DIEHL, of the same committee, read his report on FLUID EXTRACTS. He regretted that since his last report he has not been informed of further co-operation in this

branch of the work. Owing to limits of time he leaves the selection of menstrua and the construction of formulæ for the future, and confines himself in this report to the following questions:

1. Does fractional percolation present any advantages over "simple" percolation?

2. Is it advisable to employ heat in the preparation of fluid extracts?

3. Can the formulæ for fluid extracts be so constructed that all measurements shall be by weight?

4. Should the present strength of fluid extracts be retained?

After detailing his extensive experiments, Mr. Diehl says, in answer to the first question, that the adoption of fractional percolation is not justified, if we consider the extra trouble and time involved. In reply to the second question he says, after giving the reasons for his conclusion, "I unhesitatingly reply that the moderate heat required in the preparation of fluid extracts on the scale of the Pharmacopœia does not materially injure them. In answer to No. 3 he says, "I do not see how we can gain anything by discarding an accuracy that is attainable by care, for one that is only attainable by accident, no matter how careful the manipulation may be." Of the fourth question Mr. Diehl says that, in his opinion, "in the majority of instances fluid extracts are more concentrated than is necessary to successful medication." Furthermore, it is his belief, unsupported, however, by direct experiments, "that fluid extracts are, in many instances, too concentrated to hold in solution all that the menstruum is capable of extracting, and that liquid concentration of just half the strength of fluid extracts would be far more permanent preparations. For such preparations he proposes the name "*saturations.*"

MR. LLOYD says that spirit of nitrous ether, as made by officinal process, is liable to be of different ethereal strengths, even with great care from manipulation. He says it may also contain free nitric acid, and occasionally H_2SO_4, from bursting bubbles in retort. Water coming over at the end of the distillation also tends to hasten subsequent decomposition.

By modifying the present process of the U.S.P., he says he obtains a product of a definite strength. The formula of the present Pharmacopœia may be left unaltered up to the words "distil two fluid ounces as before," when he would say, "add the distillate to its bulk of solution of chloride of calcium, and cautiously agitate; separate, by means of a separating funnel, the lower solution, and immediately add 5 parts of ethereal liquid to 95 parts of alcohol." He also suggests that sulphuric acid be added to the alcohol in the retort in a small stream with agitation, then adding the nitric acid, then distil until the distillate equals ½ the alcohol. He thinks there is no economy in carrying the operation further.

Mr. Lloyd also presented, through the Committee on the Pharmacopœia, papers regarding the preparation of CITRATE OF IRON AND AMMONIUM, TARTRATE OF IRON AND POTASSIUM, HYDRATED OXIDE OF IRON, AND CITRATE OF IRON AND QUININE (soluble). These subjects were discussed at some length by Messrs. Maisch, Markoe, Diehl, Ebert, and others. The Association then adjourned to 3 P.M.

THIRD DAY.—*Afternoon Session.*

The Association convened at 3 o'clock, President Sloan in the chair. The minutes of the morning session were read and approved. The first business was the election of twenty-two

NEW MEMBERS,

as follows: W. A. Irvin, Kokoma, Ind.; N. W. Yeakle, Lafayette, Ind.; F. G. Pauley, St. Louis, Mo.; H. G. Goodale, Jamaica, N. Y.; L. F. Stevens, Jamaica, N. Y.; N. G. Hildreth, Cheviot, Ohio; A. Timberlake, John R. Perry, Joseph Bartels, and L. Mueller, of Indianapolis; E. B. Hull, Wellsville, N. Y.; Wm. M. Davis, Brooklyn, N. Y.; G. C. Wallace, Bellfontain, Ohio; Justus Wohlfarth, N. Y. City; Thos. Dover, Dayton, Ohio; A. J. Inloes, Binghamton, N. Y.; David D. Graff, Nyack, N. Y.; Chas. E. De Puy, Chelsea, Mich.; D. E. Prall, Philadelphia, Pa.; R. B. Arnold, Geneva Lake, Wis.; N. W. Edwards, Fairmount, Ind.; J. H. Andrews, Seymour, Ind.

MR. C. S. HALBERG presented, through Prof. Remington, a volunteer paper "ON GALENICAL PREPARATIONS OF THE PHARMACOPŒIA," and a new form of medication termed "SACCHARATED EXTRACTS." The author spoke at length of defects in pharmacopœial methods for tinctures, fluid and solid extracts, and proposes saccharated preparations as a remedy. An

AMENDMENT TO THE CONSTITUTION,

proposed at the twenty-fifth annual meeting, was then adopted. It strikes out the words "United States" in the third line of Article I., and inserts therefor "America," so as to make the sentence read as follows:

"Its aim shall be to unite the educated and reputable pharmacists and druggists of *America* in the following objects."

The following AMENDMENT TO THE BY-LAWS, proposed by Committee of Ways and Means in 1878, was then adopted.

Resolved, That Article V., Chapter VII., of the By-laws be amended to read: Any member not in arrears to the Association, who shall pay to the treasurer the sum of $75 during the first year of his connection therewith, or after five years $70, or after ten years $60, or after fifteen years $50, or after twenty years $40, shall become a life member, and shall be exempt from all future annual contributions.

Two other amendments proposed by the committee were indefinitely postponed.

An amendment to by-laws, requiring delegates to the Am. Pharm. Ass. to pay initiation fee, was adopted.

The recommendations of the Committee on the Secretary's and Treasurer's Report were formulated into amendments to the by-laws and adopted. This empowers the Secretary to sell accumulated exchanges and journals, and provides for the appointment of local collecting agents.

MR. SARGENT suggested the appointment of a special committee to devise means for increasing the membership of the Association. Prof. Maisch thought the local agents should perform this work. On motion, the President appointed Messrs. Sargent, Ebert, and Buck as such committee. The committee was subsequently increased to five, with Mr. P. W. Bedford and Mr. Jones, of Philadelphia, added.

PROF. MARKOE offered a resolution providing that a committee be appointed to receive contributions and provide for the publication of the work of the Committee on the Revision of the Pharmacopœia, which was adopted.

The same gentleman then called up his resolution, amending the by-laws, providing that newly-elected officers shall take their seats at the beginning of the last session at the annual meeting, which was lost.

PRESIDENT SLOAN, appointed as the Committee on Publication of the Pharmacopœia Dr. Geo. Ross, of Pennsylvania; Mr. Chas. Rice, of New York, and Prof. Lewis Diehl, of Kentucky. The President also appointed on the committee to solicit members Messrs. Sheppard, of Boston; Cowdry, of Chicago, and Schæffer, of Iowa, in place of Messrs. Sargent, Buck, and Ebert, who declined to serve.

THE COMMITTEE TO SELECT PLACE FOR MEETING

in 1880 (Messrs. Vincent Davis, Wm. H. Crawford, and Hiram Griffith) reported, recommending Saratoga Springs, N. Y., as a meeting place. The report of the committee and recommendation were adopted.

PROF. REMINGTON, of the Committee on the Revision of Pharmacopœia, then read his contributions on "Tinctures." A number of quite important modifications are proposed. The introduction of Tinctura Aurantii Recentis, as it is a useful adjuvant to mixtures. The making of Tinctura Cannabis from the herb instead of from the extract. The substitution of alcohol for diluted alcohol in

Tinctura Cantharidis and Tinctura Capsici. The introduction of Tinctura Buchu, Chiraytæ, Cocci, Conii Fructus, Croci, Cubebæ, Erythroxylon, Eucalypti, Gelsemii, Guaranæ, Hydrastis, Pilocarpi, Pyrethri, Rhei aromatica, Rhei Dulcis, Thuyæ, Vanillæ as additions to the list. The dropping of Tinctura Conii (Foliorum), because better substituted by Tinctura Conii Fructus, of Tinctura Humuli, Iodinii Composita, Jalapæ, Rhei et Sennæ and Veratri Viridis. The report will be published in full by the special Committee appointed to publish all of the proposed changes in the Pharmacopœia reported to the Association.

After which followed adjournment to 9 o'clock Friday morning.

FOURTH DAY.—*Sixth Session.*

The Association met at 9 o'clock, President Sloan in the Chair. The minutes of the previous meeting were read and approved. A number of persons were then proposed for membership. Mr. Chas. F. Fish, of Saratoga Springs, was elected Local Secretary for the ensuing year.

NEW MEMBERS.

Messrs. Dundas Dick, of New York; Julius Haag, of Indianapolis, and J. F. Brandon, of Anderson, Ind., were elected members. The Association then adjourned for half an hour.

Seventh Session.

The Association being called to order, after the transaction of the usual routine of business, the following were also elected members: F. Kessler, Louisville, Ky.; Adolph Metzerer, Indianapolis; H. A. Mott, New York; H. W. Adams, Hackensack, N. J.; and Joseph G. Underhill, Brooklyn, N. Y.

The Committee on Centennial Fund reported progress, and urged members to subscriptions.

PROF. MAISCH exhibited a specimen of salicylate of cinchonidia.

PROF. REMINGTON resumed the reading of his report on Tinctures, which was illustrated by numerous specimens.

The Committee on Exhibition (Messrs. H. W. Garrison, Chicago; C. C. Spannagel, Philadelphia; J. B. Dill, Indianapolis; A. R. Bayley, Mass.; and Emil L. Boerner, Iowa), reported progress, and asked for two months' time to complete its report, which was granted.

MR. HENRY S. WELLCOME exhibited a number of curiosities collected by himself in his travels in Central and South America, notable among which was a small bag of coca leaves and a bottle made from gourd, also a suspensory bandage, all of which were dug from the tombs of Incas; he also showed a quiver of arrows poisoned with curare, which he obtained from Nappa Indians. Among other things, a pair of scales and stone weights, such as are used by the Indian physicians, created some interest. He also exhibited some grains of barley used by native druggists as grain weights. Mr. W. gave some very interesting accounts of the practice of medicine and pharmacy in the countries which he has visited.

At the conclusion of his entertaining account of his travels, the thanks of the Association were unanimously voted to Mr. Wellcome for the patient labor of his researches and the manner of their presentation to the Association.

The thanks of the Association were also voted to the local Secretary, the local Druggists' Committee, and the citizens of Indianapolis for the completeness of their hospitable reception and entertainment of the members. After the reading of the minutes, the Association adjourned, to meet on the second Tuesday of September, 1880, at Saratoga Springs, N. Y.

MEMBERS IN ATTENDANCE.

George F. H. Markoe, C. Lewis Diehl, John M. Maisch, Henry J. Menninger, Chas. A. Tufts, H. D. Garrison, J. M. Good, Thomas F. Main, E. A. Gessner, Joseph P. Remington, E. H. Sargent, Joseph Roberts, Charles E. Ferris, Geo. W. Kennedy, Chas. T. Hildreth, Chas. W. Hancock, Edmund Boeking, Elisha Post, N. Wolf, E. T. Dobbins, J. H. Richardson, R. O. Wilson, Chas. Heinitsh, J. F. Judge, Joseph L. Lemberger, Frank M. Harper, J. H. Teemster, William H. Crawford, Eli Lilly, W. Rogers, W. J. Gordon, Oscar A. Beckman, G. A. Newman, Peter Nodler, John Colgan, Emil Martin, W. H. Averill, Geo. Ross, G. J. Luhn, John Ingalls, Wm. G. Mortimer, A. W. Eckel, C. O. Michaelis, F. J. Whiting, J. Jungmann, Chas. L. Eberle, Vincent Davis, John J. Frost, A. R. Bayley, R. H. Venable, F. M. Gray, Henry Schrade, F. H. Butler, Sam'l Campbell, Phil. C. Candidus, T. L. A. Greve, Geo. H. Schafer, Geo. W. Sloan, P. W. Bedford, E. Harvey, Frank A. Davidson, T. P. Cook, E. Goodman, Adolph W. Miller, Wm. Saunders, A. S. Lane, Emil L. Boerner, Chas. L. Spannagel, Chas. M. Miller, Alonzo Robbins, Robt. W. Gardner, R. H. Rademaker, J. B. Dill, W. S. Plumer, Jr., Albert E. Ebert, T. J. Jasper, J. G. Campbell, Chas. W. Tobey, H. T. Jarrett, Otto S. Wuesthoff, F. W. Walker, Jr., Jos. S. Evans, O. S. Hallberg, Sam'l Gerhard, Henry S. Wellcome, Ed. G. Pfingst, Louis Lehn, Henry Kiehlhorn, Hiram E. Griffith, G. A. Mangold, Robt. H. Cowdry, Sam'l L. Coffin, Adolph G. Vogeler, Thos. Whitfield, Geo. Buck, Chas. Huston, Jefferson Oxley, H. P. Thorn, A. S. Snyder, H. J. Schlaepfer, Geo. Eger, Fred. F. Reichenbach, Geo. McDonald, H. J. Marshall, Enno Sander, M. H. Webb, J. D. Wells, C. F. G. Meyer, T. Roberts Baker, J. H. Andrews, A. C. Wallace, C. F. Goodman, Adolph Metzerer.

THE MEETINGS AND EXHIBITION.

The meetings of the Association were held in the Supreme Court room. The room was appropriately fitted, and the bench and officers' tables decorated with rare and beautiful flowers. The meetings were well attended; there were probably about 100 members present. The entire arrangements were as perfect as it was possible to make them, for the comfort and convenience of the Association, and reflected great credit on the local Committee of Pharmacists who had them in charge.

The exhibition was held in Masonic Hall, a building directly opposite the Supreme Court rooms. There also the good taste and judgment of the local Secretary and Committee were everywhere visible. The exhibition was a very large and interesting one, and every inch of space in the large hall was filled. The display consisted of chemicals, drugs, pharmaceutical preparations, rare and beautiful botanical specimens, pharmaceutical appliances, and shop furnitures. The leading drug houses of the country, as well as chemical manufacturers, were represented by large and valuable exhibits, and not a few of the tables gave evidence of the skill and research of the practising pharmacist. Space will not permit us to notice the exhibition in its details, and to notice only a part would render us liable to the charge of having made invidious distinctions. The exhibition was in every respect one of the most interesting one which the Association has ever had.

SOCIAL MEETINGS AND ENTERTAINMENTS.

On the evening of Tuesday, Sept. 9th, the *Microscopical Society* held an informal levee at the Grand Hotel. under the direction of Dr. Hubbard, of Indianapolis. At this meeting both the gentler and the sterner sex were well in attendance, and many pleasant acquaintances were made and renewed. Several hours were spent in social intercourse and the examination of the many interesting objects under the lens. Mr. Henry Jameson, Dr. F. S. Newcomer, Dr. Fletcher, Mrs. Lulu Butterfield, Dr. Butterfield, Dr. M. Wells, Dr. Edward Grahn, and Dr. Joseph G. Rogers all exhibited very fine microscopes and objects. In all, 112 specimens were exhibited to good effect.

On Wednesday evening, the members of the Association, and the ladies accompanying them, were enter-

tained at the Hall of the *Maennerchor Singing Society*. The programme consisted of vocal music by the *Maennerchor*, and instrumental pieces by *Beissenherz' Military Band*. After the concert, social intercourse and dancing was indulged until the "wee sma' hours grew apace."

On the afternoons of the meeting-days, the local Committee very kindly provided carriages and guides for the visiting ladies, and the various places of interest in and around the city were visited.

THE BANQUET AND HOP

tendered by the local druggists to their visiting brethren and friends was a most elegant affair. The parlors and corridors of the Grand Hotel were decorated with cut flowers and growing plants. Over the dining-room door were the initials "A. P. A." in white flowers on a green ground. There were, besides the pharmacists and their friends, many invited guests, embracing the best society of the city. Dancing commenced at an early hour. At 11 o'clock, the guests, to the number of about 300, sat down to thoroughly weighted tables, which, after an invitation from Dr. Ward, they proceeded to lighten. A number of toasts and responses were given. Mr. T. Roberts Baker, of Richmond, Va., replied to the toast of "The American Pharmaceutical Association;" Dr. Theophilus Parvin, to "The American Medical Association;" Gov. Thos. A. Hendricks, to "The City of Indianapolis;" Prof. G. F. H. Markoe, of Boston, to "The Colleges of Pharmacy;" Mr. James Roberts, of Baltimore, to "The Profession of Pharmacy;" and Mr. J. M. Lemberger, of Lebanon, Pa., to "The Ladies." After the company had reassembled in the parlors, dancing was kept up until a late hour. The Committee of Arrangements were untiring in their efforts to entertain all the guests. The dining-room of the Hotel being, however, inadequate in size to the occasion, provision was made for a private banquet at the "Circle Club House," where about thirty members sat down to do justice to a substantial feast and "a feast of reason and a flow of soul." Toasts were given and speeches made by Professors Maisch, of Philadelphia; C. Lewis Diehl, of Louisville; E. H. Sargent, of Chicago; Dr. H. J. Menninger, of New York; Messrs. Albert Ebert, of Chicago; Charles Eberle, of Philadelphia; G. J. Luhn, of Charleston; P. Candidus, of Alabama; and Adolph Metzerer, of Indianapolis.

OHIO STATE PHARMACEUTICAL ASSOCIATION.

In answer to a call issued by Mr. L. C. Hopp, Ph.G., of Cleveland, O., and signed by a number of the prominent druggists of the State, a meeting was held in the Board of Trade Rooms at Columbus, on the 2d of September, to take the necessary steps for forming a State Pharmaceutical Association.

Prof. J. F. Judge, of Cincinnati, was chosen temporary Chairman, and Dr. T. J. Casper, of Springfield, temporary Secretary. The Chairman then called upon Mr. Hopp to state the object of the meeting, which was done in the following concise manner. "The object to be attained is, to have an association formed, to elevate the character of the profession; to unite the reputable druggists of the State; to foster the education of those who are learning the art; to stimulate the talent of those who are engaged in the practice of pharmacy, and, ultimately, to restrict the sale of medicines to persons qualified to practise pharmacy."

A committee was then appointed by the chair, composed of Dr. T. J. Casper, of Springfield; F. F. Johnson, of Bucyrus; C. Huston, of Columbus; O. T. Wuesthoff, of Dayton; Dr. R. M. Byrnes and J. F. Judge, of Cincinnati, to draft a constitution and by-laws, to be submitted to the Convention for its adoption. The committee soon returned with their report, and the Convention reviewed it, section by section, and adopted the same, pretty much as reported. After this they were adopted as a whole, and it was further decided by vote that the organization should be called and known by the name of "The Ohio State Pharmaceutical Association."

A committee was then appointed by the Chair, consisting of P. H. Bruck, F. Harrington, and L. C. Hopp, to make nominations for permanent officers, and to report at the evening session. On motion, the Convention adjourned until 8 P.M.

EVENING SESSION.

The Convention reassembled at 8 P.M.; after the reading of the minutes, the next business in order was the signing of the Constitution and By-laws, and the payment of the constitutional initiation fee of two dollars, together with the annual dues of one dollar, whereupon some *forty* of the members of the Convention stepped forward and placed their names to the documents.

The committee to nominate permanent officers then reported, as follows: For *President*, Prof. J. F. Judge, of Cincinnati; *1st Vice-Pres.*, J. N. McCoy, of Kenton; *2d Vice-Pres.*, M. S. Mooney, of Cardington: for *Secretary*, L. C. Hopp, of Cleveland; for *Treasurer*, Charles Huston, of Columbus; for *Executive Committee*, S. S. West, of Cleveland; T. J. Casper, of Springfield; and C. W. Toby, of Troy. On motion, the Secretary was empowered to cast a vote for the Association for the nominees as reported by the committee, and as a result they were elected to the several offices respectively. This being all the elective officers prescribed by the Constitution, the President then proceeded to the appointment of the following

COMMITTEES.

On Trade Interest.—P. H. Bruck, of Columbus; Charles Ridgeway, of Yellow Springs, and Charles Faust, of Cincinnati. The duty of this committee is to bring before the next meeting anything that may be of interest to the trade in general.

On Papers and Queries.—J. U. Lloyd, of Cincinnati; N. Rosenwasser, of Cleveland, and F. F. Johnson, of Bucyrus. The duties of this committee are to prepare queries for the next meeting, and examine papers submitted to the Association.

On Pharmacy Laws.—Dr. R. M. Byrnes, of Cincinnati; J. N. McCoy, of Kenton; Dr. F. J. Casper, of Springfield; O. T. Wuesthoff, of Dayton; and C. R. Cornell, of Columbus. The object of this committee is to take into consideration the advisability and preparation of proper and suitable laws to govern the practice of pharmacy in Ohio.

The following *Delegates* were then nominated to attend the meeting of the American Pharmaceutical Association on the 9th of September, at Indianapolis, Ind. C. W. Toby, C. Huston Ayres, T. J. Casper, O. T. Wuesthoff; *Alternates*, J. U. Lloyd, S. S. West, C. Hirst, P. H. Brock, J. N. McCoy.

The roll of members was then called, and ten persons signified their willingness to furnish papers for reading at the next meeting.

On motion, the Executive Committee was instructed to have copies of the Constitution, By-laws, and minutes of the proceedings of the Association printed; also to have printed blank forms of application for membership in the Association, and blank certificates of membership. On motion, the Executive Committee was also authorized to take proper steps to have the Association duly incorporated.

PLACE OF MEETING.

The place for holding the next meeting was next considered, and Dayton, Yellow Springs, Springfield, and Columbus were mentioned; on the first ballot, Dayton and Yellow Springs had a majority of votes. Dayton was subsequently chosen as the place for holding the next meeting, the third Wednesday in May, 1880, being the time agreed upon.

Votes of thanks were tendered to the City of Columbus for the use of the Board of Trade Rooms; to Charles Huston, for the interest taken in the meeting at Columbus, to the Secretary, for his services; to Messrs. Hopp and West, of Cleveland, for the active part taken in

arranging for the meeting, and to the *State Journal*, and *Democrat* for a report of the proceedings.

A communication was read from the druggists of Columbus, who were in harmony with the aims of the Association, inviting the members to an entertainment furnished by them in honor of the founding of the Association. On motion, the Ohio State Pharmaceutical Association then adjourned to meet at the rooms of Ruhl, Corbatt & Co., where they sat down to a most sumptuous repast, which will long be remembered by those present, and was such as only can mellow the keen, sharp appetites of Ohio Pill-makers. Numerous speeches and courtesies were exchanged; President Judge occupied the place of honor at the head of the table, and made a very telling and effective speech in favor of the infant Association.

The hospitality of the druggists of Columbus left nothing to be desired. The harmony of the proceedings, from first to last, warrant the belief that the Association has before it a bright, prosperous, and effective future.

Salicylate of Iron.—J. WALLIS WHITE, of Glasgow, describes salicylate of iron as being, in a dry state, a reddish-brown powder, very insoluble, with difficulty manipulated, but when prepared according to the following formula, capable of making an elegant solution.

Sulphate of iron	24 grains.
Salicylate of sodium	30 "
Acetate of sodium	20 "
Water	1 ounce.

Dissolve.

In this case case the iron appears to be in the state of a proto-salt. The solution has at first a pale port-wine color; on lengthened exposure to air the color deepens, and a precipitate of what appears to be a per-salt of iron occurs. The taste is by no means unpleasant. Each teaspoonful contains about 4 grains of salicylate of iron. Acetate of potassium, spirits of nitric ether, tincture of digitalis can be added without causing a precipitate.

He recommends it in such cases as the following: as a prophylactic against septicæmia, in zymotic affections, *e. g.*, diphtheria, typhoid, scarlatina; combined with glycerin as a mouth wash; in erysipelas tablespoonful doses have excellent effects; in anæmia it rather improves than interferes with digestion; in skin diseases and desquamative nephritis.—*Glasgow Med. Jour.*, Aug.

Treatment of Diphtheria by Carbolic Acid and Iodoform.—J. N. GARNETT, of Columbia, Mo., applies a caustic solution of carbolic acid to the false membrane, lightly brushes over all the adjacent swollen parts with the same, and applies iodoform to any abraded or ulcerated spots. In cases seen at an early stage, a mixture of equal parts of carbolic acid and glycerin will ordinarily answer. The iodoform having been finely powdered, can be blown against the surface by means of a glass-tube.—*Am. Journ. of Med. Sci.*

To Allay Cough and Secure Rest in Phthisis.—DR. H. GIBBONS, JR., of San Francisco, makes use of the following formula to relieve the night cough and restlessness of patients suffering with phthisis:

℞ Tinct. belladonnæ	℥ ij.
Syrupi scillæ	℥ ij.
Morphiæ sulphatis	gr. iv.
Syrupi tolutani	ad ℥ iv.

M. Sig. A teaspoonful at bed-time, repeated if necessary.

Japanese Cement.—Mix the best-powdered rice with a little cold water; then gradually add boiling water till a proper consistence is acquired, being careful to keep it well stirred all the time; lastly, it must be boiled for one minute in a clean saucepan. This paste is beautifully white, almost transparent, and well adapted for fancy-paper work or other things requiring a strong and colorless cement.

NOTES, QUERIES AND ANSWERS.

[*Under this heading we shall, to the best of our ability, endeavor to answer such questions addressed to us as come within the scope of this journal, provided they are accompanied by the name and address of the writer. Answers to queries received after the 5th of the month will lie over until the next issue. Unless special instructions to the contrary accompany the query, the initials of the correspondent will be quoted at the head of each answer.*]

When asking for the formula of an unusual, patented, or proprietary compound, always accompany the query with any information you may already possess regarding the locality in which it is used, its use and reputed effects, in order to enable us to make inquiry without waste of time and labor. When it can conveniently be done, send also a specimen of the label used on packages of the compound.

No. 622.—**Carbolized Jute** (J. W. W.).*

Dr. Robert F. Weir, surgeon to the New York Hospital, some time ago introduced this as a substitute for carbolized gauze in Lister's dressing. In large hospitals economy in such materials as carbolized gauze is absolutely necessary. The cost to the Hospital of carbolized gauze varied from six to eight cents a yard; the cost of the carbolized jute (below described) is 50 cents a pound, plain jute costing from the importers (the Dolphin Manufacturing Co., 65 Duane St., N. Y.) 8 cents per lb. By observation, it has been ascertained that one pound of jute, in a large dressing, as for amputations, compound fractures, etc., will go as far as 8–10 yards of gauze, and, in small dressings, it will go much further. By the aid of the former apothecary, Mr. Nathan Rosenwasser, Dr. Mitchell prepared a carbolized jute, containing 7.2 per cent of phenol, which costs only 15 cents per pound. This is accomplished mainly by the use of benzine instead of alcohol in its preparation.

The formula is as follows: for 1 lb. (or 7000 grains avoirdupois) of jute take:

Crystallized carbolic acid	700 grains.
Paraffin	700 "
Resin	2,800 "
Benzine	3 pints.

Or, in other words, for a pound of jute 10 per cent of carbolic acid is required, 40 per cent of resin, and 10 per cent of paraffin, with enough benzine to thoroughly moisten.

The larger the quantity of jute impregnated at one time, the smaller in proportion is the requisite quantity of benzine.

The resin, in coarse powder, is first dissolved in the benzine; the paraffin, broken up in small pieces, is added, and then the carbolic acid (which must be free from water), previously melted by placing the bottle containing it in hot water. The various solids dissolve readily in the cold benzine. The whole operation should be done in a room in which no gaslight or flame of any kind, is allowed.

The benzine used should, preferably, be that sold as 74° deodorized gasoline. Any receptacle that will answer to pack the jute in lightly, and allow the liquid to percolate through, with a stop-cock or other attachment to draw off the liquid from below, will answer; for small quantities, such as a pound or less, an ordinary tin percolator answers; for larger quantities an oil can, open above, or an old barrel, with a faucet below, will answer.

The jute having been sufficiently picked to insure an even and regular body, is packed as tightly as possible into the percolator, and the prepared benzine solution poured on from the top, and what has not been absorbed allowed to drain from the faucet into a receptacle below.

* The answer to this query has been taken from the *Am. Journ. of Med. Sci.*, April, 1879, p. 458.

This is poured on top again and drained, and again poured on, till all the liquid has been absorbed. The jute is then taken out of the percolator, and the threads partially picked and spread out to dry, either in the open air or in a room suitable for drying by means of cold draughts of air. The inflammable nature of benzine renders it necessary to use extra caution in making large quantities at a time, and, whenever practicable, drying in the open air should be preferred.

There being more liquid than quite sufficient to moisten the whole of the jute, the carbolic acid and resin are more evenly distributed than by the formula of Münnich, who uses so small a quantity of liquid that it has to be sprinkled over parts of the jute, and mechanically distributed over the rest, so that a few threads will have a large percentage of carbolic acid, while the rest will get only the little they can obtain by proximity to those already overcharged with the mixture.

No. 623.—**Smoothening New Liquors** (D. C.).

Various methods have been proposed for accomplishing this purpose. A very common way is to add to the whisky, or other liquor, a little glycerin, or some syrup, or honey, not enough to allow the flavor of these substances to be detected, but yet enough to cover the sharp taste. Some also use a small quantity of a pure tasteless and odorless oil, as fine olive oil, or poppy-seed oil, or oil of sweet almonds, agitating briskly, and then removing the oil which floats on top. Electricity, or rather the galvanic current, has also been highly recommended. This is to be applied by means of a small (2 to 4) cell battery, the platinum or silver poles of which dip into the liquor. It is said to require from one to three weeks to fully ripen the liquor and make it mellow. This latter method is very well spoken of. A method, which is now being tried, consists in passing ozonized air through the liquor. Thus far the method promises to effect the necessary changes with great rapidity.

The other queries contained in your note are reserved for consideration.

No. 624.—**Rose Water** (P. & Co.).

The finest rose-water is that which is prepared by distilling water from fresh or at least well-preserved rose-petals (from *Rosa Centifolia* L.). In absence of these, the essential oil *may* be used, but if you employ the usual process of incorporating essential oils into water, namely trituration with some inert substance and water, with subsequent filtration, you will obtain a product which has a peculiar harsh after-flavor. A better method is to distill water from a retort, or flask, or still, in the upper part of which there is suspended a small sponge upon which the requisite amount of oil of rose has been dropped. 8 drops of oil of rose is sufficient for 5 quarts of water, and of this 4 quarts are distilled over. You will find this subject pretty fully treated in our last volume.

No. 625.—**Cement which Resists Acids** (A.).

You do not state in what manner this cement is intended to be used, whether for luting joints, or for capping bottles, or other purposes. We, therefore, give a formula which may probably be employed for most purposes:

Melt together carefully 1 part of caoutchouc (India-rubber) with two parts of linseed oil, and gradually incorporate with it 3 parts of white bole, so as to form a plastic mass.

This cement is not at all attacked by hydrochloric, and but very little by nitric acid. When heated it softens but very little. It does not easily dry up on the surface. If this cement is mixed with ½ of its weight of litharge, or minium, it dries up in the course of time, and becomes hard.

This is known as "Benicke's Cement."

No. 626.—**To Color Oils Red with Aniline-Colors** (Inquirer).

Fuchsine (hydrochlorate of rosaniline) is not soluble, or only to a very slight extent, in fatty oils. But the base of fuchsine (rosaniline itself) is soluble. Digest 100 parts of fuchsine, reduced to fine powder, with 55 parts of water of ammonia (spec. gr. 960, or containing 10% of ammoniacal gas). This causes the decomposition of the fuchsine into hydrochloric acid, which unites with the ammonia, and into rosaniline, which separates. Allow the mixture to cool, filter, wash the remaining rosaniline and dry it. Then dissolve it in purified oleic acid. With this solution all fatty oils may be colored red. We would, however, not advise you to color hair-oils in this manner, as the color has a great affinity for the skin, and would strongly adhere to the latter.

No. 627.—**Liquid Glue** ("Pyro").

The following yields a good product, provided the proper kind of glue is employed:

500 parts of the best, white, transparent glue are broken into small pieces, covered with 670 parts of distilled water, and allowed to stand until the pieces have become soft, and nearly all the water has been absorbed. Any pieces which may from time to time project beyond the surface of the water are to be pushed under. The mass is now melted on a water- or steam-bath, and 75 to 83 parts of commercial nitric acid, spec. gr. 1380, are added very slowly, and with constant stirring. Of course, the glue solution must be contained in a vessel which is not attacked by the acid.

When using a weaker acid than that above mentioned, it may happen that the mixture gelatinizes on cooling. In this case, the mass is to be remelted, and more acid be added. But it is better to wait a few days before doing this, as the glue sometimes liquefies of its own accord. Too much acid makes the glue too thin, and destroys its adhesive properties.

Another formula yielding a very good product is this: Take of best white glue, or better, of best French transparent gelatine, 8 parts. Cut it fine, cover it with distilled water, and soak it until soft; then pour off any excess of water. Melt it on a water-bath, and add to it 1 part of glacial acetic acid. When thoroughly mixed, bottle it.

No. 628.—**Elixir of Guarana** (H. B. & Co.; R.).

This is simply made by mixing the fluid extract of guarana with simple elixir. The fluid extract is best prepared with a menstruum of 8 parts of alcohol and 4 parts each of glycerin and water. The simple elixir may be made after the formula which we have several times published, as, for instance, on p. 56.

℞ Ext. fl. guaranæ..... 2 fl. oz.
Elixir. simpl.....14 fl. oz.

Each teaspoonful represents about 7½ grains of guarana. The dose is, therefore, from 1 to 3 teaspoonfuls.

No. 629.—**Salicylate of Sodium** (J. M. H.).

This salt is very frequently employed in medical practice at the present time. It is made by adding to a solution of salicylic acid in hot water, enough sodium carbonate or bicarbonate to *almost* neutralize the acid, and then evaporating to dryness. Contact with iron in any form must be carefully avoided, and the sodium salt must, of course, be also free from the smallest traces of iron. An excess of acid must be retained, as it has been found that the salicylate of sodium assumes a dark color as soon as the slightest amount of free alkali is present.

Salicylate of sodium is easily administered, as it is by no means harsh to the taste. Mixed with syrup, simple elixir, honey, or other vehicles, it is readily taken. Salicylic acid, by itself, is, however, rather hard to take. Among all the proposed methods of administration, none is so effective as that of enveloping it in wafer-capsules, with or without powdered extract of licorice (see our Sept. Number, p. 283).

No. 630.—**Elixir Glycyrrhizæ Compositum** (Wm. S., Kans.).

The following formula has been calculated by one of our correspondents on the basis of various formulæ heretofore proposed, substituting *parts* by *weights* for definite weight and measure. A convenient quantity of the elixir, on a small scale, will be obtained by substituting

for *part* the quantity "10 grains." The resulting product will then measure about 1 pint.

Take of

Licorice root, cut and bruised, *ninety parts*,	90
Sugar, *two hundred parts*,	200
Water, *a sufficient quantity*,	q.s.

Digest the licorice root with

Water, *six hundred parts*,	600

for an hour on a water-bath, then heat to boiling, boil for about 15 minutes, and then strain with strong expression. Pass through the strainer enough water to make the decoction weigh *seven hundred parts*, 700

Then take of

Star-anise, in No. 40 powd., *six parts*,	6
Cinnamon, in No. 40 powd., *five parts*,	5
Coriander, in No. 40 powd., *four parts*,	4
Caraway, in No. 40 powd., *two parts*,	2
Nutmeg, in No. 40 powd., *one part*,	1
Alcohol, 93%, *a sufficient quantity*,	q.s.
Water, *a sufficient quantity*,	q.s.

Mix the powders, pack them firmly in a conical percolator, then pour upon them about one-half of a mixture of

Alcohol, *seventy parts*,	70
Water, *forty parts*,	40

When the percolate begins to drop, close the orifice with a cork, and set the percolator aside in a warm place for four days. Then allow the percolation to proceed, pouring gradually more of the menstruum on top, until the percolate weighs *one hundred parts*, 100

Add this percolate to the strained decoction of the licorice, let the mixture stand 24 hours, filter and add the sugar. Dissolve the latter by agitation, then filter again, and wash the filter with enough of a mixture of alcohol, *seven parts*, and water, *four parts*, until the whole filtrate weighs *one thousand parts*, 1,000

No. 631.—**Russian Spirits** (W.).

There is a liniment known under this name, which is used for rheumatism. The formula is:

Olei sinapis destillati,	parts	12
Olei terebinthinæ,	"	75
Camphoræ,	"	75
Liquor. ammon. fort.,	"	75
Tinct. capsici,	"	75
Alcoholis fort.,	"	1000

No. 632.—**Lip-salve; Cold Cream** (A. J. and W. B. K.).

The following formulæ are recommended:

Lip-Salve.

Spermaceti,	40 parts
Lard, perfectly pure and fresh,	80 "
White wax,	20 "
Oil of sweet almonds,	5 to 10 "

according to the season of the year, are melted together, the mixture colored with a sufficient quantity of alkanet, by digesting the root with the melted mass, and the latter then suitably perfumed, for instance, with

Oil bergamot,	2 parts
Oil orange,	3 "

The mass is then poured out into moulds. It is customary to pour it into tin-tubes, from which it is removed when cold, and then covered with tin-foil.

Cold Cream (Crême celeste).

1. Spermaceti,	30	parts.
White wax,	24	"
Oil of sweet almonds,	168	"

are melted together at a gentle heat, the melted mass poured into a warmed porcelain or wedgewood mortar, stirred until it begins to solidify, and then intimately mixed with

Rosewater,	70 parts.

After stirring until cold, there may be added, for every 10 oz. of the mixture,

Oil of rose,	2 drops.
" of bitter almonds,	3–4 "

This cream is white. The following formula yields a cheaper, slightly yellow, but still very good product:

2. White wax,	166	parts.
Olive oil, finest,	500	"
Rosewater,	100	"
Oil of bergamot,	15	"
Oil of bitter almonds,	q.s.	

To be prepared as the preceding.

Glycerin-Cream (Crême de Glycerine).

Spermaceti,	60	parts.
White wax,	30	"
Oil of sweet almonds,	250	"
Rosewater,	10	"
Glycerin,	20	"

To be prepared like cold cream, and to be perfumed with oil of rose and oil of bitter almonds.

Almond Cream (Crême d'Amandes).

Lard, perfectly pure and fresh,	220	parts.
Solution of potassa, containing 26% of caustic potash,	120	"
Alcohol, 60%,	10	"
Oil of bitter almonds,	q.s.	

Triturate, in a porcelain or wedgewood mortar, the lard and potassa soulution, and let it stand a few hours. Then add the alcohol and sufficient oil of bitter almonds to give it the proper flavor. Finally triturate until the mass is uniform, and resembles mother-of-pearl.

This cream has a handsome look, but is not so bland as the first-mentioned varieties.

Other Queries which have reached us will be answered in our next number.

NEW PATENTS.

[*The following list is compiled from official sources, especially for* NEW REMEDIES, *by S. H. Wales & Son, Solicitors of Patents, 10 Spruce St., New York, who will furnish gratis to subscribers any information relating to this department.*]

PATENTS GRANTED DURING MAY, 1879.

May 6th.

Bottle-stopper, C. S. Thompson,	215,079
Bottle-stopper, H. Barrett and J. Bailey,	214,987
Dental engine, E. T. Starr (R),	8,704
Dentist's chair, E. T. Starr,	215,075
Medical compound, J. E. Kleber,	215,135

May 13th.

Bottle-case, H. H. and B. Hartmann,	215,353
Bottle-stopper lock, A. H. Warner,	215,256
Dental plugger, H. D. Justi,	215,226
Teeth, filling, W. H. Rollins,	215,397
Yeast, pure, J. C. Pennington,	215,287

May 20th.

Bottle-stopper, W. H. G. Savage,	215,682
Bottle-stopper fastener, A. W. Porter,	215,668
Cereals, L. S. Chichester,	215,578
Pills, manufacture of, J. H. Gill,	215,452
Scales, calculating attachment for, H. H. Ham, Jr	215,607

May 27th.

Bottle-cork fastener, T. H. Shahan,	215,838
Dental hand piece, H. D. Justi,	215,932
Desulphurizer, I. M. Phelps,	215,971
Instrument case and dental engine, B. M. Wilkerson,	215,851
Invalid chair, F. Bohsert,	215,871
Microscope, W. H. Bulloch,	215,878
Plaster and pad, R. M. Kennedy,	215,937
Teeth, artificial, T. W. Holt,	215,924

LABELS REGISTERED DURING MAY, 1879.

1,948. "Aindrieg's Universal Pain Reliever." Stanley K. Pierson, Leroy, N. Y.

1,949. "Race's Indian Blood Renovator." A. R. Race, J. W. Race, W. W. Race, C. W. Race, Raceville, N. Y.

1,953. "Dr. Eric Adolphus' Genuine Swedish Bitters." W. H. Brill, Pittsburgh, Pa.

1,955. "Dr. M. W. Case's Carbolate of Tar Inhalant." Milton W. Case, Philadelphia, Pa.

1,958. "This Precious Ointment Cures all Diseases of the Skin, etc." Emily Scheurmann, Baltimore, Md.

1,960. "Sherk's Indian Diarrhœa Cordial, etc." Wilson Sherk, Buffalo, N. Y.

1,963. "Clark's Indian Cough Syrup." Heuson and Harrison, London, Tenn.

1,966. Somer's Antidote to Malaria." M. A. Liver, New York, N. Y.

1,967. Dr. C. A. Holman's Catarrhal Pad." J. H. Noble, Eau Claire and W. A. Sallade, Reedsburg, Wis.

1,970. "Compound Tar Porous Plaster." Alexander Wilson, Camden, N. J.

1,971. "Chase's Vegetable Golden Sticking Salve." George W. Chase, Rome, N. Y.

1,972. "Harless' Medicated Cough Caramels." Adolphus Harless, St. Louis, Mo.

1,974. "Simond's Glove and Ribbon Cleaner." W. H. Simond, Haverhill, Mass.

TRADE MARKS REGISTERED DURING MAY, 1879.

Medicinal Preparations.

7,264. Henry R. Stevens, Boston, Mass. The word-symbol "Familine."

7,265. Henry R. Stevens, Boston, Mass. The word-symbol "Vegetine."

7,271. Joseph A. Hatry, Brooklyn, N. Y. The word-symbol "Tropical."

7,272. Joseph A. Hatry, Brooklyn, N. Y. The figure or pictorial representation of a cinchona plant, substantially as shown.

7,278. C. E. Brown, Madera, Cal. "The name 'Dr. C. E. Brown's' and my portrait, substantially as shown."

7,290. James La Forest King, Springfield, Ill. A portrait, represented as surrounded by an oval frame, and leaning against two barrels lying upon their sides, with their rear ends converging toward the centre.

7,293. Charles A. Jerman, Fort Wayne, Ind. The arbitrary word "Gonorrhine."

7,295. Ira E. Wilbur, Amenia, N. Y. The arbitrarily selected word "Berkshire," and the portrait of a child, substantially as shown.

7,299. Basye & Co., Cumberland, Me. The representation of a young girl falling into an epileptic fit, and the name or title "Prof. Zosche's."

7,300. Hamburg Ague Pad Co., St. Louis, Mo. The word-symbol "Hamburg."

7,308. Dukchard & Co., Baltimore, Md. The representation of a hand grasping a wisp or sheaf of barley.

7,325. Wm. M. Caterson, Philadelphia, Pa. The facsimile or authograph signature "W. M. Caterson, M.D."

7,329. R. C. Knox & Co., Chicago, Ill. The symbol or figure of a group of three kings standing erect.

7,342. John C. Nichols, New London, Ct. The symbol shown, it being a representation, or illustration, of the interior of a room, with a bottle standing upon a table, and a human figure erect.

7,344. Joseph R. Dennis & Co. The word-symbol "Iealia."

7,345. Fisher & Fairbanks. Boston, Mass. The arbitrarily selected word "Rock," and the seal bearing the monogram "F. and F."

7,362. Francis F. Braillard, Brooklyn, N. Y. The pictorial representation of a sphinx, and the arbitrarily selected letters "S. R. L."

7,365. Wm. W. Brownfield, St. Louis, Mo. The pictorial representation of a crow, and the name or title "Dr. Crow's."

7,369. Jay C. D. Curtiss, Rochester, N. Y. The number-symbol "5091."

7,371. Stanislas Limousin, Paris, France. The monogram, as shown, formed by the letters "S. L."

7,374. Alfred H. Hall & Samuel L. Hodgman, Boston, Mass. The arbitrarily selected word "Diamond."

Perfumery, Soap, etc.

7,269. R. M. Burwell & Son, New Haven, Ct. The arbitrarily selected figure five (5), and circle of stars surrounding it.

7,279. Lewis U. Bean, Philadelphia, Pa. The fanciful word "Queen."

7,303. Colgate & Co., New York, N. Y. The arbitrarily selected words "Wedding March," and the two bars of music shown.

7,328. Charles S. Higgins, Brooklyn, N. Y. The arbitrarily selected word "Novelty.

7,361. Amelia A. Heaton, Binghamton, N. Y. The fancifully formed word "Creamine."

7,372. Allison Bros., Middletown, Ct. The word "Loyal."

Paints.

7,297. Porcelain Paint Co., Baltimore, Md. The arbitrarily used word "Porceline."

PATENTS GRANTED DURING JUNE, 1879.

June 3d.

Dental plates, process and apparatus for the manufacture of, L. N., G. N., and L. N. Winderling 216,250
Dental plugger, electric, E. L. Paine 216,055
Mask, sanitary, P. H. Foster 216,171
Medicaments, apparatus for capsuling, S. Limousin. 216,197
Medicine package, J. H. Guild 216,182

June 10th.

Ammonia, manufacture of sulphate of, H. Grouven. 216,323
Bottle-stopper fastener, W. P. Eayrs 216,261
Dental engine, W. H. Gates 216,321
Medical compound, B. G. DuRette 216,317
Medical compound, C. Heaton 216,401
Medicine, veterinary, N. & A. Rosenthal 216,348
Syringe, J. H. Guest 216,396

June 17th.

Bottle-stopper, C. G. Hutchinson (R) 8,755
Dental plugger, R. B. Donaldson (R) 8,763
Oxide, process and apparatus for manufacturing carbonic, C. T. DuMotay & E. J. Jerzmanowski 216,584
Surgical splint, J. E. Johnson 216,680

TRADE MARKS REGISTERED DURING JUNE, 1879.

Medicinal Preparations.

7,377. Henry Lloyd, Cincinnati, Ohio. The word-symbol "Miracle," the name or title "H. Lloyd's," and the figure of a crescent.

7,382. Frederika Stadtmüller, Brooklyn, N. Y. The word "Latexine," and the following described arbitrarily selected characters. The first character has the form of the capital letter U, the left cross stroke being omitted, and has a dot nearly at the center of the figure. The second character approximates in form to the capital letter S, the lower turn of which terminates abruptly in a long slightly-curved base stroke. The third character has substantially the

form of the capital letter P, turned over to the right nearly into a horizontal position, and nearly in line with the base stroke of the second character.

7,393. Samuel Simes, Philadelphia, Pa. The monogram composed of the letters "S. S.," and the facsimile of my autograph signature, "Samuel Simes."

7,409. Elias H. Carpenter, Providence, R. I. The representation of a censer or vaporizer.

7,412. William H. D. Newth and Charles Lux, Wadsworth, Ill. The name or title "Dr. Newth's," and the pictoral representation of a group of women and children, a bottle, and two spoons crossed behind, as shown.

7,420. George E. Swan, Beaver Dam, Wis. The representation of the ring as shown.

7,421. Jos. G. Williamson, Hyde Park, Ill. The arbitrarily selected word "Brazilian," and the representation of a schooner or other vessel under full sail, substantially as shown.

7,424. Adolph C. Brendecke, Chicago, Ill. The autograph signature "Dr. Baldwin Franke."

7,531. Henry A. Tilden, New Lebanon, N. Y. The arbitrary word or symbol "Maltosine."

Soap, Perfumery, etc.

7,387. Clay W. Holmes, Elmira, N. Y. The arbitrarily selected word "Frostilla," and the name or title "Holmes."

7,388. John Lloyd, Harleigh, Pa. A representation of Absalom, expressed pictorially, as shown in the facsimile.

7,437. Christopher Lipps, Baltimore, Md. The arbitrarily selected word "Look-Out."

7,441. Champlin & Co., Buffalo, N. Y. The fac-simile autograph signature "Champlin & Co."

Miscellaneons.

7,402. Frederick K. Edwards, Brooklyn, N. Y. The winged sphinx, with the three heads, as shown.

Labels.

1,977. "Crosby's Headache Cure." Crosby & Co., New York, N. Y.

1,979. "Mrs. E. M. Newton's Hair Tonic." Elizabeth M. Newton, Mount Clair, N. J.

1,984. "Bennett M. D.'s Nepenthe's Ointment." M. D. Bennett, German township, Keokuk Co., Iowa.

1,985. "The Crawford Liver and Kidney Pad." Walter W. Crawford, St. Louis, Mo.

1,986. "Carbolated Petroleum Salve." Stevens & Marsh, New York, N. Y.

1,987 "Carbolated Petroleum Soap." Stevens & Marsh, New York, N. Y.

1,989. "Williams & Moore's Stockton Cure for Diphtheria or Putrid Sore Throat." Williams & Moore, Stockton, Cal.

1,996. "Asiatic Cholera Drops." John E. Van Den Bylardt, Patterson, N. J.

Alizarin Carmine.—A new coloring material is manufactured under this name by the Austrian Alizarin Manufacturing Company. With tin as a mordant, it dyes wool orange; with alum, red. It is said to surpass all previous dyes of similar tints in beauty, brilliancy, durability, and variety of shading with different mordants, and resistance to change under exposure to light, air, perspiration, and washing.—*Fortschr. der Zeit.*

Transportion of Acids.—M. Kuhlman, in place of carboys, employs floating reservoirs in the form of an ordinary boat, fitted with air chambers to give them sufficient buoyancy. For sulphuric acid of 60° B. and upward these are constructed of sheet iron, and have been in successful use for some years on the canals of the North. For hydrochloric acid he uses cylinders of hardened India rubber, kept in their form by an external framework of wood. A modification of the structure serves for transportion by rail. —*Scient. Am. Suppl.*

PRESCRIPTIONS AND FORMULÆ.

We shall be obliged if our readers, who make use of these formulæ, will inform us of their experience with them, and note any errors or modifications worthy of attention.

Tooth-Wash.—

EDITOR NEW REMEDIES.

DEAR SIR:—I send you a recipe for a tooth-wash, which I have recently perfected, and which may prove of sufficient interest for publication in your journal. The idea of using soapbark in similar combination for spongy gums was originally suggested to me some years ago by my friend, Mr. Wm. Graner, an eminent druggist at New Orleans, La., and on repeated trials proved an efficient remedy in each instance.

Take of

Quillaya saponaria (soapbark) in coarse powder.....16 grams

add

Alcohol.....100 cc.

Aqua destillata.....150 cc.

macerate for ten days and filter. Then add

Cochineal.....0.5 grams

dissolved in

Aqua menthæ piperitæ.....125 cc.

also:

Ol. gaultheriæ.....2 cc.

rubbed up with

Glycerin .....50 cc.

finally sufficient distilled water to make the whole measure ¾ litre.

A few drops on a tooth brush previously dipped in water will, when rubbed on the teeth, produce a rich lather; it cleanses thoroughly and is also an excellent remedy for soft gums, which it hardens in a short time. It is fragrant and agreeable to use.

W. MYERS, M.D.

WYOMING TERRITORY, July 28th, 1879.

Thymic Acid (Thymol) and Thymate of Sodium.—Dr. Alvin gives the following formula for using thymol in place of carbolic acid in caustic, alterative, or astringent applications to the mucous membrane of the throat. He has found these preparations much better tolerated, more agreeable. and quite as active as those of carbolic acid:

Caustic.

℞ Thymol cryst.....pt. 1.
Glycerinæ puræ.....pts. 2–4.

℞ Thymol cryst.....pt. 1.
Iodinii.....pt. 1.
Potassii iodidi.....pt. 1.
Glycerinæ puræ.....pts. 5–15.

Alterative.

℞ Thymol cryst.....pt. 1.
Glycerinæ puræ.....pts. 50.

℞ Thymol cryst.....pt. 1.
Iodinii.....pt. 1.
Potassii iodidi .....pts. 1–2.
Glycerinæ puræ.....pts. 12.0

℞ Thymol cryst.....pt. 1.
Tannin.....pt. 1.
Glycerinæ puræ.....pts. 100.

Astringent.

℞ Thymol cryst.....pt. 1.
Glycerinæ puræ.....pts. 500.

Pastils.

(Useful in superficial stomatitis, irritation of the upper air-passages, and erosion of the mucous membrane in

smokers, and they are very useful in quieting spasmodic cough. They should be made trial of in whooping-cough.)

℞ Thymate of sodium..... 1 milligr. (gr. $\frac{1}{60}$).
Chlorate of potassium.....10 centigr. (gr. $1\frac{1}{2}$).

In severer forms of stomatitis, amygdalitis, pharyngo-laryngitis:

℞ Thymate of sodium ..... 1 milligr. (gr. $\frac{1}{60}$).
Borax..... .....10 centigr. (gr. $1\frac{1}{2}$).

These pastils may be taken to the number of six to ten daily.

Thymol-Vaseline Ointment is made by dissolving twenty grains of thymol in an ounce of vaseline. It is useful in eczema and as a parasiticide.

Of **Glycerole of Thymol** the formula is: thymol, 20 grains; glycerin, rectified spirit, of each, an ounce; distilled water to 16 ounces. Useful in pityriasis, and, when diluted, as an effective antiseptic mouth-wash.

It is said that thymol has the property of immediately removing the smell of tobacco.

Antimerulion is the name of a patented paint or coating to be applied to wood-work of all kinds, to preserve it from rot in the ground, or to make it incombustible. It consists of two solution, one of calcium chloride with which the wood is first saturated or coated, and a solution of sodium (or potassium) silicate, which is applied afterwards. The two solutions react upon each other to produce insoluble calcium silicate.

New Cements for Dental and other Purposes.—Charles Sylvester Rostaing di Rostagni, of Philadelphia, has procured patents for preparing cements for dental and other purposes, which are compounds of pyrophosphates.

A mixture of acid or neutral calcium phosphate is fused in a crucible together with zinc phosphate, or 1 part of calcium phosphate is fused with 10 to 30 parts of oxide of zinc, and enough ammonium phosphate to saturate the zinc oxide. The solidified, glassy mass is dissolved in dilute phosphoric acid; to the solution may be added a little magnesia or oxide of cadmium. The solution is evaporated, and when wanted for use the mass is dissolved in a little distilled water.

The inventor also prepares mixtures of phosphate of zinc, or magnesium, or cadmium with the above mass.

Another cement is prepared from 3000 parts oxide of zinc, to which are added 5 to 50 parts of boracic acid dissolved in alcohol or water. The oxide of zinc may partly be replaced by lime, magnesia, or baryta. The mixture is heated for several hours to a white heat, and if desired colored, a sufficient quantity of an aqueous solution of the characteristic metallic salts used for producing colored beads, may be previously added.

Zinc silicate, prepared by double decomposition of sodium or potassium silicate with a soluble zinc salt, may also be employed.

Blue-black Writing Fluid.—Digest together for a fortnight 18 ounces of bruised galls, $1\frac{1}{2}$ ounce of cloves, in 10 wine-pints of water. Press and filter. Add to the clear mixture 6 ounces of sulphate of iron and 2 fluid drachms of sulphuric acid, shaking well until solution is effected. Next add an ounce of indigo-paste, and filter if necessary. The ink must be kept in well-corked bottles, and it should be made in vessels of glass or stoneware.—*Canad. Pharm. Journ.*, Feb., 1879.

Formulæ for Aniline-Inks.—

Red Aniline-Ink: Triturate in a porcelain mortar 3 drachms of best crystallized water-soluble roseine, and dissolve it in boiling distilled water, in the last portions of which 2 oz. of gum-arabic has been dissolved. The amount of water depends on the tint which it is desired to produce.

N.B. Roseine is acetate of rosaniline; the hydrochlorate of rosaniline is known as fuchsine.—In place of roseine, *eosine* (or tribrom-fluoresceine) may be used, which gives a yellow-red magnificent tint.

Blue Aniline-Ink: $1\frac{1}{2}$ oz. of the so-called "Bleu soluble Parisienne" (soluble Paris Blue, also called Cornflower-Blue) is dissolved in a mortar in 3 to 4 quarts of boiling distilled water. Gum-arabic may be added to the solution.

N.B. Soluble Paris Blue is the ammonium salt of triphenyl-rosaniline-sulphuric acid, $C_{20}H_{16}(C_6H_5)_3N_3(H_2SO_4)_2H_2SO_4$.

Violet Aniline-Ink: $1\frac{1}{2}$ oz. of so-called Primula-Violet is dissolved in 3 quarts of boiling distilled water. This may be converted into a copying ink by adding 4 oz. of sugar, 4 oz. of glycerin, and 10 oz. of gum-arabic.

N. B. Primula Violet is also known as Dahlia or Hofmann's Violet, of which there exist a number of different shades. Perhaps the finest is that known as No. 6. This coloring matter consists of salts of trimethyl-rosaniline, and triethyl-rosaniline.

Other tints may be prepared from other aniline-colors. In our experience it is best to add to the solution of an aniline-color a small percentage (3 to 5%) of alcohol, and also of glycerin (1–4%).

Ink for writing on Sheet-Tin.—

1. Sulphate of copper (1 gram) is dissolved in 20 grams of water, 2 drops of hydrochloric acid are added, and a smuch solution of gum-arabic to make the ink adhesive. This ink writes intensely black, and is very durable. It must be written with copper pens. The addition of a little pyrogallic acid is advantageous, because the writing appears at once, which is not the case with the simple copper-solution.—C. BERNBECK, in *Pharm. Zeit.*

2. A jet-black, lustreless ink, or rather varnish, for writing on sheet-tin, which is absolutely insoluble in water, and dries instantly, may be prepared by dissolving shellac in alcohol (2 oz. in 1 pint), filtering with the aid of chalk, and mixing with finest lamp-black.

Incidentally, it may be remarked that a turpentine solution of shellac with lampblack produces, on drying, a *glossy* black. On the other hand, an alcoholic solution produces a perfect *dead* black, without a trace of lustre. —ED. N. R.

Cherry Tooth Paste.—

Cochineal powd.	3 oz.
Cream of tartar	1 oz.
Honey	32 oz.
Orris root, in very fine powd.	4 oz.

Mix in a stone mortar, and allow to ferment in a warm place. After fermentation has ceased, add:

Glycerin	4 oz.
Tragacanth powd.	½ oz.
Burnt alum	3 ʒ
Dried carbonate of sodium	1 oz.

Finally add enough

Precipitated chalk	q.s.

to make a paste.

The latter may previously be perfumed with

Oil of gaultheria	20 ♏
" of cloves	80 ♏
" of geranium	1½ fl. ʒ

—H. W. LANGBECK in *Pharm. Journ.*, July 26th.

Furniture Cream.—

1.

Yellow wax	1 lb.
Yellow soap	2 oz.
Oil of turpentine	2 pints.
Boiling water	2 "

Melt the wax and soap over a slow fire, add the turpentine, and, lastly, stir in the water gently until it is quite cold.—*Pharm. Journ.*

2.

Yellow wax	1½ ℔.
Oil of turpentine	4 pints.
Yellow soap	½ lb.
Water	4 pints.

Dissolve the wax in the oil of turpentine, on a water-bath, in a closed vessel. Then add the soap, previously

dissolved in the water, and stir until nearly cold.—A. W. POSTANS, *Pharm. Journ.*

3. Yellow wax	5	oz.
Oil of turpentine	1	pint.
Castile soap, powd	1½	oz.
Water	2	oz.

Prepare in same manner.—*Pharm. Journ.*

4. White wax	1	oz.
Yellow wax	2½	oz.
Castile soap	1	℥
Oil of turpentine	10	oz.
Carbonate of potassium	1	℥
Boiling water	10	oz.

Melt the wax and turpentine together; dissolve the soap and potassium carbonate in the water; mix while warm, and stir until cold.—G. J. BULL, *Pharm. Journ.*

Dentifrice Water.—

Calamus root	½	℥
Pellitory root	6	ʒ
Resin of guaiac	6	ʒ
Red saunders	2	ʒ
Cinnamon	50	gr.
Cloves	50	gr.
Fresh horseradish leaves	4	
Alcohol	12	fl.
Distilled water	7	fl.
Dilute acetic acid	3	fl ʒ

Macerate for eight days, then strain and express. In the strained liquid dissolve

Salicylic acid ..... 40 grs.

N.B. The horseradish leaves should be bruised in a stone mortar.—H. W. LANGBECK, in *Pharm. Journ.*, July 26th.

Popp's Anatherine Dentifrice.—

Cloves	4	ʒ
Red saunders	4	ʒ
Guaiac wood	160	gr.
Cinnamon	160	gr.
Myrrh	380	gr.
Oil of cloves	10	gtt.
" of cassia	10	gtt.
Alcohol	3	fl. ʒ
Rose water	26	fl. ʒ

—*Hager's Manuale* and *Pharm. Journ.*, July 26th.

Florida Water.—No. I.

Oil of bergamot	4	ounces.
" lemon	6	"
" lavender	1	"
" cloves	6	drachms.
Alcohol (wine measure)	3½	gallons.
Water do.	6	pints.

The oils and alcohol must be mixed and allowed to stand a day or two, after which the water should be carefully added.

No. II.

Oil of bergamot	8	ounces.
" orange	4	"
" lavender	3	"
" cloves	1½	"
" cinnamon (true)	¼	ounce.
Tincture of orris	½	pint.
" Peru balsam	¼	"
Alcohol	4	gallons.
Water	6	pints.

Mix, and let it remain quiet for some days, before filtering and bottling. Florida water has a great popularity in the West Indies and South America.

Glycerine Jelly.—

Calves' foot jelly	2	parts.
Warm and add—		
Glycerin	1 or 2	parts.
Essence of cochineal	q. s.	
Perfume	q. s.	

The above makes a perfect transparent emollient jelly, which keeps good any length of time in stoppered or corked bottles, but evaporates in bottles closed by screw caps.—*Monthly Mag. Pharm.*, July.

Wheys.—*Common.*—I. 1,500 parts milk, heat to boiling, and add 15 parts vinegar; strain. II. 1,500 parts milk, 1¾ parts tartaric acid.—*Sour Whey.*—1,500 parts milk, and 15 parts cream of tartar.—*Effervescing Whey.*—1,000 parts of common whey are poured into a bottle containing 7 parts of bicarbonate of soda, and 53-10 parts Tartaric acid in crystals; cork and put in a cool place.—*Ferrated Whey.*—700 parts of milk and 3½ parts solution of acetate of iron; or dissolve in common whey, 500 parts, 1½ parts citrate of iron and ammonium.—*Tamarind Whey.*—1,400 parts milk, heat till boiling, add 40 parts tamarind pulp, diluted with 40 parts hot water; strain when cold.—*Alum Whey.*—1,000 parts milk, and 10 parts alum.—*Wine Whey.*—1,000 parts milk, and 250 parts hock.—*Vitriolated Whey.*—1,400 parts milk, and 3½ parts diluted sulphuric acid.—*Monthly Mag. Pharm.*, July.

Carlsbad Salt.—(DR. ULOTH.) The natural Carlsbad Salt, held in solution by the Carlsbad Mineral Spring, contains about 2% of potassium sulphate, which constituent was usually left out, when preparing the salt artificially. The author directs the following proportions, in order to prepare artificial Carlsbad water:

Sodium sulphate, anhydrous	45 parts.
Sodium bicarbonate	33 "
Sodium chloride	20 "
Potassium sulphate	2 "

Dissolve 4 parts of this in 500 parts of water.—*Pharm. Zeit.*, and *Pharm. Centralh.*

Indelible Ink without Silver Salts.—Triturate 1.75 gm. of aniline black with 60 drops of strong hydrochloric acid and 42–43 gm. of strong alcohol. The mixture is diluted with a hot solution of 2.5 gm. gum arabic in 170 gm. of water.

This ink does not attack steel-pens, and is neither destroyed by mineral acids, nor by caustic alkalies.—*Pharm. Centralh.*

Treatment of Barber's Itch.—DR. BRAME recommends the following treatment: Shave off the hair or cut them very short; then apply once or twice a week an ointment composed of:

Prepared chalk	10	parts.
Coal-tar	1 to 4	"
Glycerin	5	"
Simple cerate	50	"

Or the following:

Prepared chalk	8	parts.
Coal-tar	1 to 2	"
Linseed oil	20	"

—*La Ruche Pharm.*

Ortiz's Febrifuge Pills.—

℞ Cinchoniæ sulphatis,
Ferri picratis. ..... āā 15 grains.

Make into 12 pills, to be taken four at a time, with an hour's intermission between the doses.—*Ibid.*

Styptic Colloid.—Dr. Richardson's formula for this preparation is said to be as follows:

℞ Acidi tannici,	ʒ ij.
Alcoholis (absolute)	ʒ ss.
Ætheris	ʒ fl. iiss.
Collodion	q.s. ad fl. ʒ xij.

How to Make a Spice-bag.—Take half an ounce each of cloves, allspice, cinnamon, and anise-seed, bruised, but not powdered, in a mortar. Put these between two layers of coarse flannel about six inches square, and quilt them in. Soak this for a few minutes in hot spirits (brandy, whiskey, or alcohol) and water, equal parts, It is to be applied while warm, removing it when it gets cold.—DR. A. A. SMITH, in *The Medical Record.*

ITEMS.

College of Pharmacy of the City of New York.—The first conversational meeting will be held on the 3d Thursday in October (16th), at 3 P.M.

The members of this College, and all others who may desire to participate in the discussions, are invited to be present.

The object of this meeting is entirely an *informal* exchange of ideas on all matters of interest and novelty (both scientific and commercial) connected with pharmacy and kindred sciences. Contributions and queries may be either oral or written. If nothing of special interest should happen to be presented, a subject for discussion will be started by the Committee on Queries.

Thus it will be seen that it is worth while to attend, and the degree of interest in matters presented will generally be in a direct ratio to the number of persons present.

The "quiz" has been found to be of such general usefulness that the Board of Trustees have decided to continue it through this, the fiftieth session, and, accordingly, have appointed Messrs. H. L. Coit and B. Frank Hays quiz-masters. No student should fail to become a member of the class.

Xaver Landerer, whose portrait we herewith present to our readers, to whom he is not a stranger, is a native of Bavaria, where he was born in 1809. After concluding his preliminary training and studies, he entered at the philosophical faculty of the University of Munich, in 1831–32, and next year began the study of medicine. He was soon afterwards appointed Apothecary to the King of Greece, Otto I., who had been chosen by the powers as the ruler of the new kingdom. He had no sooner settled at Athens, than he began to utilize his varied store of learning in the training up of promising pupils, hundreds of whom are now scattered over the Orient, and have been the means of rescuing pharmacy and its collateral branches from the danger of being overwhelmed by ignorance and superstition. During 1834 and '35 he was appointed one of a commission to prepare a Greek Pharmacopœia. This was published officially in 1837, the authors being: Joh. Bouros, Xaver Landerer, and Jos. Sartorios. In 1868, after the work had long been out of print, Landerer caused a new edition to be published, in which he was, however, not permitted to alter any portion of the text, but which he accompanied by a commentary. The whole expense of this was borne by him, and he never received any compensation for it. In 1835–36, a pharmaceutical school was founded at Athens, which all those who had acted as pharmacists or surgeons during the war of emancipation were ordered to attend, for the purpose of acquiring a sounder knowledge of the theory of their profession, and to go through a regular practical training. In this school Prof. Landerer labored from morning to night, regardless of his own comfort, and only intent on the accomplishment of the purpose for which the school was created. When the University of Athens was founded, in 1837, he received the appointment as Professor of Physics, Chemistry, and Pharmacy. Soon after his appointment, the plague made its appearance on the island of Poros. By order of the Government he went there, and succeeded, through the most energetic exertions, extending over a space of three months, in arresting and eradicating the epidemic, and in preventing its spread to the neighboring islands and to Greece. His chief weapon against the fell disease was chlorine fumigation on a very large scale.

During the progress of the plague, a certain class of people, who had become acclimated to the disease, made their living by attending the sick. While there were no doubt many honest persons among these, yet there were also scoundrels who preferred the death of their patients in order to appropriate their property. This fact is aptly illustrated by the appalling statement made to us by Prof. Landerer, that, when the plague had just died out in Poros, and these nurses saw their occupation gone, some of them attempted to transport infected matter to other islands, so as to start a fresh outbreak. Prof. Landerer himself put a stop to this by discovering upon the person of one of these nurses, who was about to depart for Hydra, *a leathern bag containing wool soaked in infected matter.*

In 1843, a sort of "know-nothing" legislature enacted a law, which required every office-holder to be native born. In consequence of this he lost his professorship; but two years afterwards, probably because no native Greek could be found to take his place, he was reinstated by a special act of the legislature, and he retained his position up to the period of King Otto's dethronement, in 1862. From this period, Prof. Landerer encountered a series of disappointments, which would have broken the spirit of many others endowed with a smaller share of self-reliance and trust in Providence. About this time, the reactionary feeling in favor of natives, and directed against foreigners, again broke out, and even former pupils of Landerer flocked to Athens to supplant him. Besides his other duties, Landerer had been for twenty-five years, without salary, Professor of Technology at the Polytechnikon. One of his former pupils, Stamatios Krinos, of Athens, succeeded in becoming director of the institution, and one of his first official acts was to dismiss his former preceptor from the office he had so long and honorably filled. As the court of the new king (George I., formerly Prince William of Denmark, second son of Prince Christian of Holstein-Glücksburg) did not require an appointed court apothecary, Landerer continued his pharmacy as a private undertaking. While still holding his professorship at the University, he gradually saw himself surrounded by men inimical to foreigners, and, after having borne the situation as long as he could, consistently with his self-respect, he finally concluded to send in his resignation, which was at once accepted. His successor in office was the same Krinos, who, as before mentioned, had shown such ingratitude towards his former teacher. Landerer, however, although he had resigned his regular professorship, continued for five years longer to give lectures (gratis) on botany. Finally, this chair was filled by a regular appointment, but his successor, Theodoros Orphanides, does not seem to have been a great acquisition, since he could not even describe a plant correctly and scientifically. Prof. Landerer received, in 1847, the degree of Ph.D. (Philosophiæ Doctor) from the University of Erlangen, and subsequently was elected Active or Honorary Member of over fifty pharmaceutical and naturalistic societies and associa-

tions in all parts of the world. He has been honored with various decorations by the sovereigns of Bavaria, Greece, Oldenburg, Turkey, Austria and Wurtemberg. His home life has been happy, and four daughters are spared to him, while all his sons have died at an age of between five and six years.

Prof. Landerer has contributed an immense number of longer or shorter articles on various subjects connected with pharmacy, or with the natural history or commerce of the Eastern part of Europe and of the Orient, to pharmaceutical literature. Most of his essays have appeared in European journals; a considerable number, also, in journals published in this country (see the back numbers of NEW REM.). His published works, to the number of twenty, treat on every subject connected with the profession; and he has constantly tried, not only to impart his knowledge to others, irrespective of any material benefit to himself, but also to keep abreast of the advancements in modern science, and thus he

*αἐι διδάσκων τε καὶ διδασκόμενος γεγήρακε.**

Drug Trade of San Domingo.—In 1878 San Domingo exported 364,000 lbs. of logwood to Great Britain, 60,000 lbs. to France, 90,000 lbs. to Germany, 254,000 lbs. to Italy, 460,000 to Spain, 1,246,000 to the United States, 40,000 lbs. to the West Indies; 16,000 lbs. of fustic to great Britain, 80,000 lbs. to France, none to Germany, 40,000 to Italy, 40,000 lbs. to Spain, 718,000 to the United States, 94,000 to the West Indies; 388,770 gallons of honey to the United States only; 50,000 lbs. of extract of logwood to France, 340,000 lbs. to the United States, 272,000 lbs. to the West Indies; 7,300 lbs. of wax to Great Britain, 33,320 lbs. to France, to Germany nothing, 26,520 lbs. to Italy, 94,350 lbs. to Spain, none to the United States, and 21,400 lbs. to the West Indies.—*Chemist and Druggist.*

Red Canary Birds.—Mr. Dusch, of Belgium, an amateur in bird-raising, gives the following directions for raising red canary birds, such as were exhibited by Mr. Bunbrose, of Derby, at the London Exhibition of 1872:

Very finely-ground cayenne pepper of the very best quality is to be mixed for each meal with stale bread soaked in well-water. This is to be pressed together so that it will not crumble, but must not form a paste. Instead of bread, the white of egg may be used.

This food should be given to the bird only before and after moulting, and it will be a waste of time to experiment on other than the Norwich breed and on those of a very dark-yellow strain.

Botanical Gardens in Germany.—*The Garden* states that in Germany nearly every town has its botanical garden for furnishing means of instruction in botany. Berlin has two, the larger of which supplies 120 institutions of learning, including 100 common schools, requiring 3,000,000 specimens. The plants are arranged in bundles and distributed in wagons. The flower described by the teacher is illustrated by a living specimen placed in the hand of each pupil.—*Pharm. Jour. and Trans.*

Vanilla Plantations in Réunion.—*The Pharmaceutical Journal* says that most of the vanilla plantations in the Island of Réunion have been destroyed by a frightful cyclone of three days' duration, and that those which have not been destroyed are greatly damaged, so that there will hardly be any harvest this year.

Substitute for Linseed-meal Poultice.—Volkhausen prepares a cataplasm by saturating a piece of thick, white felt-paper with a decoction of linseed. This is to be immersed in hot water before it is applied, when it swells considerably. It must be covered with some impermeable material, and fastened securely in place, and ordinarily does not require removal before twelve hours have elapsed.—*Am. Journ. of Pharm.* from *Pharm., Zeitung.*

The new German Tariff on articles imported from abroad, among others, includes the following substances, which are selected as being of more or less interest to our readers.

N. B.—The amount of duty is stated in marks (1 mark = 23.8 cents) to be levied upon each 100 kilos (ab. 220 pounds), unless otherwise specified.

	100 kilos Marks.
I.—*Drugs, Medicines, and Dye-Stuffs.*	
1. Ether of all kinds, Chloroform, Collodium, Ethereal Oils, excepting those named under 9. Essences, Extracts, Tinctures and Waters, containing alcohol or ether, whether used for medical or technical purposes. Varnishes of all kinds, excepting Oil-varnish. Painters' colors, lees, and pencil-colors. India ink; Water-color Boxes. Lead-pencils and colored pencils; Drawing Chalk	20
2. Oil of Juniper; Oil of Rosemary	12
3. Oxalic Acid; Potassium Oxalate. Yellow, white and red Prussiate of Potassium.	8
4. Caustic soda; Caustic potassa; Oil-varnish	4
5. Alum; Printer's Ink; Chloride Lime; Dyewood; Extracts; Gelatin; Cement; Glue; Lampblack; Blacking; Sealing Wax; Ink and Ink powder; Axle-grease; and Matches.	3
6. Soda, calcined; Sodium Bicarbonate	2.50
7. Water-glass	1.50
8. Crude Materials and Chemicals for technical or medicinal purposes, particularly drugs, medicines and dye-stuffs, unless mentioned in the preceding or following paragraphs; also Benzol and similar light coal-tar oils; Oil of turpentine, and of Rosin; Animal oil; Mineral-waters, natural or artificial, including flasks and bottles.	*free.*
Wafers; Inspissated Juices; Gunpowder; Wine-yeast, doughy or dry	*free.*
II.—*Ores, Earths, and Noble Metals.*	
Whether crude or washed, levigated, powdered, coined, in bars or in other form (unless specially excepted in another paragraph)	*free.*
III.—*Agricultural Products.*	
1. Wheat, Rye, Oats, and Leguminous fruits; and all grain not specially mentioned	1
2. Barley; Indian Corn; Buckwheat	0.50
3. Malt	1.20
4. Anise; Coriander; Fennel; Caraway	3
5. Rape and Turnip-seed	0.30
6. Other agricultural products	*free.*
IV.—*Miscellaneous.*	
1. Hops	20
2. Instruments, irrespective of the materials from which they are manufactured:	
a. Musical	30
b. Astronomical, surgical, mathematical, chemical (for laboratories), physical	*free.*
3. Caoutchouc and Guttapercha, crude or purified.	*free.*
4. Caoutchouc-threads, alone, or with other materials, but so that the threads can still be distinguished without stretching them; caoutchouc in plates, or solution	3
5. Coarse goods of soft caoutchouc, unlaquered, uncolored, unstamped; Hard-rubber goods.	40
6. Fine goods of soft caoutchouc, laquered, colored, stamped	60
7. Paper, written upon (Documents and Manuscripts); Books in all Languages, Engravings, Maps, Music, Lithographs	*free.*
8. Engravings on Metal, Stone, Wood; lithographic stones with writing or drawings; Paintings; Drawings; Medals; Statues, etc.	*free.*
9. Beer of all kinds, also Mead	4
10. Brandy of all kinds, including Arrac, Rum	48
11. Yeast of all kinds, excepting wine-yeast	42
12. Vinegar, in casks	8
" in flasks or jugs	48

* "Teaching always, as well as himself learning, he has grown old."

13. Wine, Must and Cider, also artificial beverages, not otherwise specified, in casks..... 24
Wine, Must and Cider, also artificial beverages, not otherwise specified, in flasks..... 48
14. Butter, natural or artificial..... 20
15. Meat, fresh and prepared; fowl and venison (killed); Extract of meat..... 12
16. Fish (not otherwise mentioned)..... 3
17. Fruit: Fresh Oranges, Citrons, Lemons, Pomegranates, and other tropic fruit..... 12
The importer may pay the duty for these by number. The duty then is 2 marks per 100 pieces. All damaged pieces remain free from duty, provided they are destroyed or thrown away in presence of the customs officers.
Figs, Raisins, Currants..... 24
Dried Dates, Almonds, Oranges, etc..... 50
18. Spices of all kinds, not otherwise mentioned.. 50
But spices for the manufacture of ethereal oils, by special permit, under proper control..... *free.*
19. Honey..... 3
Coffee, crude, or its substitutes (except chicory)..... 40
Coffee, roasted..... 50
Cacao, in shell, 35; cacao shells..... 12
20. Cheese of all kinds..... 20
21. Confectionery; Sauces; Preserves; prepared Fish, Mushrooms, etc..... 60
(Including all sorts of fancy nick-nacks used as relishes at table).
22. Oysters, Turtle, and Mussel or Shell Fish in general..... 24
23. Rice, shelled and unshelled..... 4
For starch manufacture, under proper control..... 1.20
24. Salt..... 12.80
" imported by way of ocean..... 12.00
25. Tobacco, leaf, unmanufactured; also stems, and tobacco-sauces..... 85
Tobacco, manufactured; Cigars and Cigarettes..... 270
Tobacco, manufactured; other kinds.....180
26. Tea.....180
27. Sugar.....100
Raw sugar..... 24
28. Oils of all kinds, in jars, flasks, etc..... 20
Food-oils: Olive, Poppy, Sesame, Peanut, Acorn, Sunflower, in barrels..... 8
Olive oil in casks, officially attested..... *free.*
Other oils, in casks..... 4
Palm or Cocoanut oil, fatty..... 2
Residues from manufacture of fatty oils..... *free.*
29. Lard, Goose-fat..... 10
Stearin; Palmitin; Paraffin; Spermaceti; Wax..... 8
30. Petroleum, crude or purified..... 6
(Duty may be levied on barrels or casks of usual and known contents. If used for other purposes than illumination, petroleum may be admitted *free*, under control).
31. Tar; Pitch; Rosin; Asphalt..... *free.*
32. Perfumed Soaps..... 30
" Fats and Oils..... 20
Perfumes, used as such..... 100

Norwegium: A new Metal.—From the *Chemical News* (July 18th) we learn that a newly discovered metal, Norwegium, has been detected and isolated by Dr. Tellef Dalhil in a sample of copper-nickel from Krageröe in Skjaergaarden. The color of the pure metal is white, with a slight brownish cast. When polished it has a perfectly metallic lustre, but after a time it becomes covered with a thin film of oxide. It can be flattened out in an agate mortar, and in hardness it resembles copper. The melting point is 350° C., and the specific gravity 9.441. Its equivalent appears to be 145.9. Only one oxide, Ng-O, has been obtained. With sulphuretted hydrogen it gives a brown sulphide, even in strongly acid hydrochloric solutions, which redissolves in ammonium sulphide. With a slight addition of potassium ferrocyanide it gives a brown, but with larger proportions a green precipitate. The sulphuric solution is turned brown on the addition of zinc, and the metal is deposited in a pulverulent state. The solutions of this metal are blue, but become greenish on dilution.

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PHARMACEUTICAL CALENDAR.—October.

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Day of Week.	Day of Month.	Society Meetings.
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Thursday	" 2.	N. Y. Coll. Ph.—Trustees' Meet.
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Thursday	" 9.	N. Y. Germ. Apothec. Society.—Monthly Meeting.
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THE APOTHECARY.

(From a Painting by H. S. Marks, R.A.)

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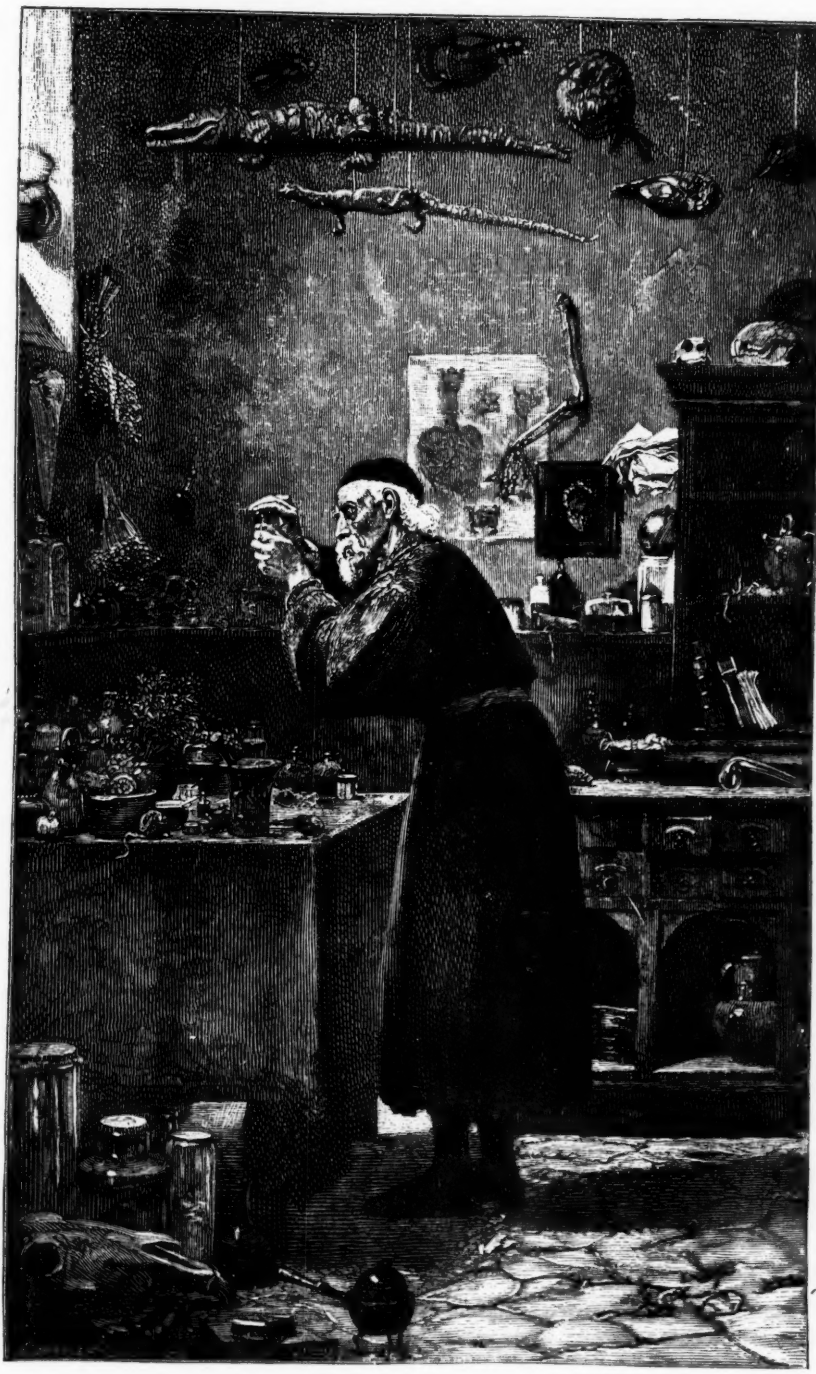
New York, November, 1879.



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